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Efficient charterparties

Notice of readiness, slow steaming and virtual arrival agreements

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LIST OF ABBRIVIATIONS

AIS	Automatic Identification System
CMI	Comité Maritime International
CMR	The Geneva Convention on the Contract for the International Carriage of Goods by Road (CMR Convention)
CMNI	The Budapest Convention on the Contract for the Carriage of Goods by Inland Waterways
CO_2	Carbon dioxide
BIMCO	The Baltic and International Maritime Council
DMSA	Danish Merchant Shipping Act (consolidation). Consolidated act no. 75 of 17 January 2014 issued by the Danish Maritime Authority
EEDI	Energy Efficiency Design Index
FCFS	First Come First Served
FMC	Finnish Maritime Code 674/1994.
GENCON	The Baltic and International Maritime Council Uniform General Charter (as revised 1922, 1976 and 1994) Code Name: "GENCON"
GHG	Green Houses Gas
IMO	International Maritime Organisation
INTERTANKO	International Association of Independent Tanker Owners
MARPOL	International Convention for the Prevention of Pollution from Ships (MARPOL)
NMC	The Norwegian Maritime Code 24 June 1994 no. 39
NOU	Norges offentlige utredninger
NYPE	The New York Produce Exchange Time Charter
OCIMF	Oil Companies International Marine Forum
P&I	Protection and Indemnity
REBUS	Towards Relational Business Practises

RPM	Revolutions per minute
SEEMP	Ship Energy Efficiency Management Plan
SMC	Swedish Maritime Code 1994:1009
SSHEX	Saturdays Sundays Holidays Excluded
SSHINC	Saturdays Sundays Holidays Included
SvJT	Svensk Juristtidning
TFEU	Treaty of the Functioning of the European Union
UNCTAD	United Nations Conference on Trade and Development
VLCC	Very large crude carriers

1 INTRODUCTION

1.1 Subject of the thesis

Transporting goods by sea is the most environmentally friendly way to transport goods.[1] IMO has estimated that ships involved in global trade during 2007 contributed with around 2.7% of the world's CO_2 emissions.[2] However, if the legislators take no further actions, a mid-range scenario would be that the world's CO_2 emissions would increase by two or three times by 2050.[3] Consequently, there is a need to take immediate actions in order to prevent such a scenario.

In order to reach more sustainable and energy efficient operations, both the private and the public sector need to take actions. Energy efficiency can be achieved by both technical and contractual alterations. The private sector could assist by improving the vessels' energy efficiency.

The aim of this thesis is to explore various means of increasing the efficiency of charterparties, both from an economical and an environmental perspective. When the speed of the vessel is reduced, the decrease in bunker consumption is directly proportional to the reduction of the emissions; seemingly a win-win situation is achieved.[4] Consequently, both the environment and the company paying for the bunkers generally profit from reducing the speed of the vessel. [5] There are various means of reducing the fuel consumption of a ves-

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[1] Niko Wijnolst, Tor Wergeland, Shipping Innovation, IOS Press BV, Amsterdam, the Netherlands, 2009, p.658.
[2] Second IMO GHG Study 2009, Second IMO GHG Study 2009, International Maritime Organization (IMO) London, UK, April 2009. p. 21
[3] *Ibid*.
[4] Christos A. Kontovas and Hariloas N. Psaraftis, *The link between economy and environment in the post crisis era: lesson learned from slow steaming*, Int. J. Decision Sciences, Risk and Management, Vol. 3, Nos. 3/4, 2011, p.312.
[5] Erik Røsæg, *Minimizing Energy Consumption in Logistics Chains – in Particular a Green Analysis of Port Operators' Responsibilities,* in: Environmental Liabilities in Ports and Coastal Areas – Focus on Public Authorities and Other Actors, Ed. Henrik Rak, Peter Wetterstein, Institute of Maritime and Commercial Law Åbo Akademi University, CorttiPrint Printing House, Turku, 2011, p. 105.

sel. For instance, IMO has implemented the mandatory application of EEDI for newbuilding and SEEMP for all vessels above 400 gross tonnage as of 1 January 2013.[6] NGOs, such as BIMCO and INTERTANKO, have produced various standard clauses on slow steaming for voyage[7] and time[8] charterparties. In addition, the virtual arrival agreements[9] target the unnecessary rush to port in the event there is a known congestion in the port. It is debated whether or not slow steaming will survive after the recession, however, there are experts that argue that slow steaming is a sustainable solution for the operators and is likely to continue to be used also in the future.[10]

From a legal perspective, speed reduction clauses are nonetheless quite complicated. A slow steaming clause might be contrary to a "due despatch" obligation in the charterparty and in a bill of lading. Consequently, a third party holder of a bill of lading might be able to hold the carrier liable for not performing the voyage with due despatch. Moreover, the slow steaming clause is preferably to be incorporated into a bill of lading, but the question remains how valid such incorporation clause is due to the mandatory regulatory regime which is applicable to bills of lading. In order to properly evaluate the risks and benefits of incorporating a speed reduction clause, these issues are assessed in this thesis.

1.2 Aim of research

This master thesis was written for University of Oslo, also as part of REBUS Project 2 'Logistics Networks', financed by FIMECC (Finnish Metals and Engineering Competence Cluster) and lead by the Laboratory of Industrial Management, Department of Chemical Engineering, Åbo Akademi University, Finland. The aim of this project is to scrutinize the relation of Finnish export industry with the sea logistics industry, and to find solutions in

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[6] IMO, *Regulations to improve the energy efficiency of international shipping enter into force*, 02.01.2013, available at: http://www.imo.org/MediaCentre/PressBriefings/Pages/01-MARPOL-EEDI.aspx (last viewed 27.10.2014).
[7] BIMCO Slow Steaming Clause for Voyage Charter Parties, Special Circular no.5, BIMCO (2012).
[8] BIMCO Slow Steaming Clause for Time Charter Parties, Special Circular no.7, BIMCO (2011).
[9] Virtual Arrival, Optimising Voyage Management and Reducing Vessel Emissions – an Emissions Management Framework, OCIMF (2010).
[10] UNCTAD (2013) Annual Review of Maritime Transport, United Nations Conference on Trade and Development (UNCTAD), p. 27.

order to enhance the efficiency of the export industry.[11] My task has been to analyse if Finnish charterparties could become more efficient and therefore serve as a tool to improve the competitiveness of both the Finnish shipping sector and export industry.[12]

1.3 Delimitation

This thesis focuses on contractual considerations in connection with slow steaming but generally disregards the technical obstacles to reduce the RPM to a critical level. A thorough analysis of slow steaming from an economical perspective will also not be carried out within this thesis research since the existing studies already cover this issue.[13] Furthermore, the harbour operations systems will also not be thoroughly examined, even if the harbour system do have a great impact on the vessel's speed choices, and the lack of efficiency in harbours have a negative impact on the environment.

1.4 Disposition

In the first part of the thesis, a general background to efficient charterparties is presented. A discussion of the balance between freedom of contract and enforcing private parties to impose more environmentally friendly clauses will be followed by a short introduction to the most important forms of contracts in the maritime sector. This is followed by a section devoted to competition law, ensuring that cooperation to develop speed reduction clauses would not be considered as distorting competition. The following section discusses some general points on maritime economics and explains why there is a "sudden" interest in slow

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[11] Åbo Akademi, Åbo Akademi leder mångmiljonprojekt, 2013, available at: http://www.abo.fi/public/News/Item/item/7971 (last visited 26.10.2014).

[12] Finland is dependent on shipping, as 90 % of Finnish export is transported by sea. It is therefore extremely essential to ensure the development of the Finnish shipping industry and to guarantee its competitiveness in order to have a good export sector. Consequently, the whole logistical chain needs to become more efficient in order to maintain its competitiveness. Fairway to the future, the future of shipping in Finland 2015 and beyond, PBI Research Institute, January 2013, available at: http://www.pbi-institute.com/files/32/Varust_Raportti_25042013_GBR_FINAL.pdf (last viewed 25.06.2014), p.2-3.

[13] Li Xu, *The impact of slow steaming practices on cost and emission from shipping*, Molde University College, 27.05.2014, available at: http://brage.bibsys.no/xmlui/bitstream/handle/11250/221520/master_xu.pdf?sequence=1&isAllowed=y, last visited 25.10.2014.

steaming. The last part of the background chapter discusses investment clauses and how they could be used in time charterparties in order to share the costs for investing in energy efficient solutions. The following chapter is scrutinizing the voyage charterparty concept and notice of readiness, which could be in a need of a general revision. The main chapter of this thesis is regarding slow steaming and virtual arrival clauses. These clauses have been drafted by NGOs and the idea is that they would be voluntarily implemented in charterparties in order to regulate a speed reduction during a voyage. The chapter is explaining and evaluating the standard clauses. Moreover, the intention is also to highlight potential legal issues which could arise as a consequence of reducing the speed of the vessel.

2 LEGAL SOURCES AND METHOD

There are various types of legal research. The obvious method in legal research is the legal dogmatic method, which in its core interprets and systemises legal norms.[14] The legal dogmatic method means that the general principles of law is the starting point in order to determine the applicable law on a specific area. Researchers that are applying this method are analysing the specific legislation, the preparatory work, case law and the legal doctrine. The legal dogmatic method has been applied in order to describe the applicable mandatory maritime legislation as well as the rules applying to third party holders of a bill of lading.

Due to a history of a close cooperation between the Nordic countries in regards of the various maritime codes,[15] legal opinions and proposals from the other Nordic countries have a great value between the countries. The Nordic solution in the various Maritime Codes enacted in Finland,[16] Sweden,[17] Norway[18] and Denmark[19] created a new system, a mixture between the Hague-Visby Rules[20] and the Hamburg Rules,[21] without inflicting on the mandatory rules in the Hague-Visby rules.[22] Unfortunately, the countries could not agree on one coherent numbering system. The Finnish-Swedish system uses of chapters while the Norwegian-Danish system implemented sequential paragraph numbering.[23] The Nordic Maritime Codes shall be considered as common Nordic legislation even if there might be minor differences in the application of the rules.[24] Accordingly, a comparative assessment

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[14] Aleksander Peczenik, *On Law and Reason*, Law and Philosophy Library, Vol. 8, Springer, 2009, p.13.
[15] Lars Gorton, *Nordic Law in the Early 21st Century – Maritime Law*, Stockholm Institute for Scandianvian Law, Vol 50, 2007, p.108.
[16] Finnish Maritime Code 674/1994 (FMC).
[17] Swedish Maritime Code 1994:1009 (SMC).
[18] The Norwegian Maritime Code 24 June 1994 no. 39 (NMC).
[19] Danish Merchant Shipping Act (consolidation). Consolidated act no. 75 of 17 January 2014 issued by the Danish Maritime Authority (DMSA).
[20] Protocol (SDR Protocol) amending the International Convention for the Unification of Certain Rules of Law Relating to Bills of Lading of 25 August 1924 (The Hague Rules), as amended by the protocol of 23 February 1968 (Visby Rules), 1979
[21] United Nations Convention on the Carriage of Goods by Sea (The Hamburg Rules) Hamburg, 30 March 1978.
[22] Hugo Tiberg, *Styckegodstransport enligt nya sjölagen*, SvJT 199, p.325.
[23] Tiberg, 1995, p.327.
[24] Gorton, 2007, p.115.

of the rules and regulations on due despatch has been applied. Consequently, the Norwegian preparatory work, i.e. NOU 2012:10[25], is of importance in the *de lege ferenda* analysis.[26] Due to the lack of case law on this particular subject in the Nordic countries, also none-Nordic cases will be of importance.

In regards of the charterparty clauses, where freedom of contract applies,[27] a law and economic analysis has been used in order to scrutinize the likelihood and willingness of voluntarily implementing more energy efficient clauses into charterparties. Due to the *de lege ferenda* assessment, interviews with practitioners in the shipping industry have been carried out. Moreover, charterparties with rider clauses and alterations has been collected from practitioners. These materials have had a fundamental impact on the thesis. The draft clauses have been analysed with the assistance of commentaries from BIMCO and INTERTANKO, as well as the general legal doctrine. Newsletters from various law firms and P&I Clubs have been of great support where there has been a lack of journals and other legal jurisprudence.

[25] NOU 2012:10 Gjennomføring av Rotterdamreglene i sjøloven.
[26] Peczenik, 2009, p.207.
[27] Subject to some exceptions.

3 BACKGROUND

3.1 Regulation of environmental issues vs freedom of contract

Environmental issues are considered important in international carriage of goods. However, the present international regimes have not dealt with the issue well enough.[28] The policy-makers have so far only encouraged sustainable freight but have not demanded it.[29]

Traditionally, it has been outside the scope of contract law to regulate on protection of the environment.[30] It hasn't been an issue for the regulators. Lately, it has been questioned if transporters might have a mandatory obligation to consider environmental issues when concluding contractual agreements within the EU.[31] Nonetheless, in none of the existing conventions and regulations[32] can such obligations be found.[33] Not even the not-yet-ratified multimodal convention, Rotterdam Rules,[34] includes any obligation to commercially organize the transportation as environmentally friendly as possible,[35] even if some modest attempts to protect the environment are present.[36] There is no hurdle for the national legislators to go further than the conventions and increase the emphasis on sustainable interpretations of maritime transport rules.[37]

According to *legal theory*, the work behind the international conventions is in line with the traditional view on private law.[38] However, the division between private and public law is

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[28] Ellen Eftestøl-Wilhelmsson, *European Sustainable Freight – The Role of Contract Law*, in Evironmental Liabilities in Ports and Coastal Areas – Focus on Public Authorities and Other Actors, eds. Henrik Rask and Peter Wetterstein, Institute of Maritime and Commercial Law Åbo Akademi University, 2011, p.241.
[29] Eftestøl-Wilhelmsson, 2011, p.241.
[30] *Ibid*., p.243.
[31] *Ibid*., p.234.
[32] Here having The Hague and Hague-Visby rules, Hamburg rules as well as CMR, CMI and CMNI in consideration.
[33] Eftestøl-Wilhelmsson. 2011. p.236.
[34] United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea (New York, 2008) (the "Rotterdam Rules").
[35] Eftestøl-Wilhelmsson, 2011, p.238.
[36] *Ibid.*, p.245.
[37] This will be further discussed in chapter 5.4.3.
[38] Eftestøl-Wilhelmsson, 2011, p.243.

gradually decreasing.[39] Consequently, many authors argue that a new approach to law is needed. Presently, sustainable arguments are not a part of the current transport conventions. One can argue that such issues shall not be mandatorily imposed upon contractual parties, as the parties should agree upon such matters themselves. Thus, contracting parties are not likely to consider environmental aspects without benefitting from it.

Since the general public is becoming more aware of environmental implications of our consuming society, it will mirror the attitude of the commercial sector as well.[40] At the same time as the green transport industry grows, the elements of sustainable transport contracts will become more widespread, and, most likely, will also have consequences for the contractual conventions applicable to the contracts in the shipping industry.[41]

3.2 Contract of Affreightment

When a shipowner agrees to carry goods by sea or promise to provide a vessel for the same purpose, the arrangement is called contract of affreightment. Traditionally, contracts of affreightment are divided between charterparties and transport documents.[42]

3.2.1 The bill of lading contract

A bill of lading is an evidence of the terms of the contract of carriage and also functions as a receipt that the cargo has been shipped.[43] The principle of freedom of contract has been restricted and international conventions,[44] implemented in national legislation,[45] regulate the basic obligations of the carrier towards the cargo owner.[46]

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[39] Eftestøl-Wilhelmsson. 2011, p.244.
[40] *Ibid*., p.245.
[41] *Ibid*.
[42] John F. Wilson, *Carriage of Goods by Sea*, Pearson Education Limited, Essex, 7th ed., 2010, p.3.
[43] Wilson, 2010, p.5.
[44] Such as the Hague, the Hague-Visby and the Rotterdam Rules.
[45] For example, FMC.
[46] Wilson, 2010, p.6.

3.2.2 The charterparty contract

A charterparty is an agreement where one party is undertaking to transport goods on their vessel in exchange for remuneration.[47] The written contract shall describe the chartered vessel and on what conditions the contract is based on.[48] Charterparties are normally divided into three different categories: time charters, voyage charters, and bareboat (demise) charters.[49] Charterparties are as a main rule subject to freedom of contract.[50]

3.2.3 Negotiating charterparty terms

Charterparties are generally of an international character due to the fact that they are most often based on a standard form. BIMCO is a shipping association, aiming to assist its members by facilitating the commercial operations by, for instance, developing standard contract and clauses.[51] BIMCO has produced over 100 different charterparty forms, used globally.[52] Specially drafted charterparties for the Nordic market are not common, with the exception of the so-called Scancon charterparty, which was in use in the 1950s. However, it never became completely accepted by the industry[53] and we can therefore assume that all standard charterparties in use in the Nordic trade have an international character. Consequently, in order to find improvements for Finnish charterparties, one need to scrutinize international standard charterparty forms.

Even if most charterparties are based on a standard form, most often these charterparties are subjected to changes and rider clauses. These individual charterparties have been concluded under various circumstances. One crucial element is time. Time charterparties are more likely to be negotiated during a longer time and voyage charterparties could be agreed

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[47] Rudolf Beckman, *Handbok i Sjörätt*, 4th edition, Åbo Tidnings och Tryckeri Aktiebolag, Åbo 1956, p. 105.
[48] Beckman, 1956, p. 108.
[49] Wilson, 2010, p.4.
[50] *Ibid*, p.3.
[51] BIMCO, available at: https://www.bimco.org/About/About_BIMCO.aspx , last viewed 16.07.2014.
[52] Gorton, 2007, p.110.
[53] *Ibid*.

upon within hours or after only a phone call.[54] Another element is the economic power; it depends on the market and the current freight rates. Most often corresponding obligations towards the cargo interests shall be taken into account in the drafting process. Consequently, the negotiation of a charterparty is under high pressure, both due to time-related and economic reasons. The underlying obligations towards, for instance, cargo owners constitute an additional risk for the parties.

Consequently, there seems to be a need for assistance in order to implement more efficient solutions in the charterparties. One way to do this is to spread the knowledge of already drafted provisions, such as BIMCOs slow steaming clauses. Another way is to scrutinize practical examples and share clauses that could be useful for others as well.

3.3 Competition law concerns

Shipowners are in the need of assistance in order to find contractual solutions, which are optimized from an environmental perspective.[55] For instance, various shipping companies could cooperate on developing such clauses. However, would this collaboration distort competition between competitors?

EU competition law, with its basis in article 101 TFEU, is of importance in today's shipping industry. The regulations regarding information exchange are rather complex, and information exchange could have restrictive effects on competition.[56] However, sharing information does not have to be an absolute threat to competition, since transparency of information could even lead to an increasing the competitiveness between companies.[57]

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[54] This information has been collected during the interviews during summer 2014 at Finnish shipping companies and companies acting as charterers. Notes with the author.
[55] Erik Røsæg, *Contracts as environmental culprits*, at the Sustainable Companies project, University of Oslo, 17.12.2013, available at: https://www.youtube.com/watch?v=96M4ajaHyPI (last visited 25.10.2014).
[56] Directorate for Financial and enterprise affairs competition committee, Roundtable on information exchanges between competitors under competition law, DAF/COMP/WD(2010)118, p. 2.
[57] Alla Pozdnakova, *Information exchange agreements between liner shipping companies under EC competition law*, in: Eds. Antonis Antapassis, et al, Competition and Regulation in Shipping and Shipping Related Industries, Koninklijke Brill NV, Leiden, 2009, p.32.

In this case, drafting environmentally friendly standard clauses shall not be an issue from a competition law perspective.[58] If the clauses are to be voluntarily implemented and the general public can get access to the clauses, such drafting cooperation agreements shall be allowed since such agreement outweighs the restriction of competition as prohibited in Article 101(1) TFEU.[59] Consequently, such harmonization and coordination of the applicable clauses would not restrict competition. However, the parties shall not share the information about freight rates and similar information. Even if standardisation of contracts and information exchange would be restricting competition, one could still argue that such a measure was needed in order to achieve efficient results, in compliance in with Article 101(3) TFEU.[60]

It should not be forgotten that shipping companies are competing against each other, also in regards of environmental aspects. Thus, cooperation on drafting slow steaming clause could have negative impact on competition.[61]

From my perspective, in order to avoid such competition law issues, the result from discussions with charterers and shipowners will be public and not only available for a limited group in the industry. A stronger cooperation between shipping companies can on the other hand be necessary in order to increase the use of slow steaming clauses in practice.

3.4 From a "law and economics" perspective

When developing more efficient solutions, in respect of a more sustainable shipping industry and in regards of more cost-effective contracts, the studies in the field of law and economic can be helpful. The legal realism movement started in the 1920s and opened up legal

[58] Alla Pozdnakova has been analysing environmental standard clauses from a competition law perspective. Alla Pozdnakova, notes from a presentation at Norske Rederiförbundet on «mulige konkurranserettslige implikasjoner av miljøsamarbeid («smart contracts») i skipsfart», 2012. Notes with the author.
[59] The topic has been futher discussed by Sander R.W. van Hees in the master thesis "A sustainable competition policy for Europe", 2011, available at: https://www.ser.nl/~/media/files/internet/educatie/scriptieprijs/scriptieprijs_2012/van_hees_volledig.ashx, last visited 30.10.2014.
[60] Pozdnakova, 2012.
[61] *Ibid*.

scholars to social science.[62] The movement later developed into the field of law and economics at the law school in Chicago.[63] When one refers to "law and economics", the phrase shall be understood as the application of microeconomic analysis to legal problems. The movement is promoting the usage of economic reasoning when developing laws in order to achieve the best possibility for justifiable and reliable legal practice.[64] For instance, Pareto analysis[65] can be used in order to analyse the correlation between fuel consumption, emission, number of ships and transportation work.[66]

Slow steaming has a major impact on the bunker consumption. If a vessel would reduce their speed by 10 %, the fuel consumption and emission would reduce by 19 %.[67] The central assumption in economics is that people rationally wants to maximize their own welfare. People are consequently adjusting in order to achieve the most efficient solution possible.[68] The free market consists of private parties, such as charterers and shipowners, with freedom of contract.[69] The governing background law is essential for the functioning of such a market economy.[70] Default rules, contrary to mandatory contract rules, are provisions in a contract, which the parties are free to change, but will govern the contract as long as the parties are silent.[71] An example of such contract terms could be, for instance, clause 38 on slow steaming in NYPE 2014. Due to the potential cost of revising contract terms, by seek-

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[62] Edmund W. Kitch, *The Fire of Truth: A Remembrance of Law and Economics at Chicago,* 1932-1970, Journal of Law and Economics, Vol. 26, No. 1 (Apr., 1983), p.164.
[63] Kitch 1983, p.165.
[64] Brian Edgar Butler, *"Law and Economics",* Internet Encyclopedia of Philosophy, ISSN 2161-0002, available at: http://www.iep.utm.edu/law-econ/ (last visited 15.07.2014)
[65] Parento was an Italian economist born in the mid-19th century and founded Parento Law.
[66] Xu, 2014. p.4 and appendix 1.
[67] Lars Kloch, *Is slow steaming good for the supply chain?* Inbound logistics, 2013, available at: http://www.inboundlogistics.com/cms/article/is-slow-steaming-good-for-the-supply-chain/ (last visited 25.10.2014).
[68] Klock, 2013.
[69] Eds. A. Mitchell Polinsky, Steven Shavell, *Handbook of Law and Economics*, Vol 1, Elsevier, Amsterdam, 2007, p. 7.
[70] Polinsky & Shavell, 2007, p. 7.
[71] *Ibid*. p. 31.

ing legal advice in-house or by external service providers, re-contracting costs could be so substantial that the default provision would have privileging effects over others.[72]

3.5 The current shipping sector and the need of efficiency

After the Second World War, the dry cargo sector has experienced seven freight market cycles, with the average of six to seven years.[73] Consequently, the shipping industry is used to market cycles and recessions. Nonetheless, the recession followed by the strong boom in the end of 2008, came as a great shock.[74] The global financial crises and the reduced trade stopped the previously growing international seaborne trade.[75] In combination with the decrease in demand, the supply of new vessels increased, as a result of orders made before the financial crises had started. Freight rates have continued to stay low and volatile as a consequence of the financial and economic crises in 2008.[76] In combination with the high[77] and volatile bunker oil prices, carriers' earnings have been reduced to close to, and sometimes even below, the operating costs. Consequently, operators had to become even more cost effective in order to stay afloat. Due to the increase in bunker costs, the tanker market economics has completely changed.[78] INTERTANKO propound that the total freight costs consists of 75 % of bunker costs.

Fuel efficiency can be increased by technical optimization and revising the contracts by for example implementing fuel efficiency agreements.[79] The trend has been to postpone

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[72] Polinsky & Shavell, 2007, p. 31.
[73] Martin Stopford, *Maritime Economics*, Routeledge, 2009, p.118.
[74] Kontovas & Psaraftis, 2011, p.312.
[75] UNCTAD (2009) Annual Review of Maritime Transport, United Nations Conference on Trade and Development (UNCTAD), p. xiv.
[76] UNCTAD, 2013, p. xiii.
[77] The bunker oil prices have more than doubled during the period between 2005 and 2012. UNCTAD, 2013, p. 26.
[78] Erik Ranheim, *Optimum Speed Calculator*, Intertanko, 28.02.2013, available at: https://www.intertanko.com/Members-Information/benchmark/Optimum-speed-calvulator/ (last visited 21.09.2014).
[79] Lisa Wortley, Birketts Ltd, Published: 16/02/2012, available at: http://www.birketts.co.uk/resources/legal-updates/1257/fuel-efficiency-measures-and-charterparty-terms--less-speed-more-disputes/ (last visited 10.06.2014)

newbuilding deliveries, scrap old vessels, maximize fleet efficiency and focus on slow steaming.[80]

INTERTANKO has developed a formula[81] to improve the calculation of the optimal speed of a vessel.[82] The optimum speed calculator is mainly intended for tankers, but according to analysts, this formula could also be used in the container and dry-bulk market.[83] The formula decides an optimum speed by taking into account the ratio of the freight rate to the fuel costs. The formula indicates that the fuel consumption is proportional to the speed with the power of three.[84] However, the formula should only be used as a guide and the owners should adjust the speed and consumption according to the characteristics of their own vessels.[85]

3.6 Investment clauses

Due to the contractual relationship, the charterer and the shipowner could benefit from co-operating on long-term solutions in order to make the charterparties more efficient. For instance, different investment clauses could enhance the implementation of flettner rotors,[8687] instalments of frequency converters[88] and changing propeller blades[89], which clear-

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[80] UNCTAD, 2013, p. xiii.
[81] The optimum speed calculator can be accessed through this link: https://www.intertanko.com/upload/93015/Web-Opt-speed.xlsx
[82] Adam Corbett, *Money to be made from slow steaming*, Tradewinds news, 08.08.2012, available at: http://www.tradewindsnews.com/weekly/281487/money-to-be-made-from-slow-steaming (last visited 27.10.2014).
[83] Corbett, 2012.
[84] Ranheim, 2013.
[85] Corbett, 2012.
[86] According to Toumas Riski, a flettler rotor could reduce the energy consumption with 20 per cent on a vessel. Jesper Alm, Vindkraft sänker frankfartygens energiförbrukning, Yle Nyheter, 24.06.2014, available at: http://svenska.yle.fi/artikel/2014/06/24/vindkraft-sanker-fraktfartygens-energiforbrukning (last visited 20.08.2014).
[87] For a technical description of the system: B. E. Launder, Dynamic performance of flettner rotors with and without thomdiscs, available at: http://www.mace.manchester.ac.uk/our-research/research-themes/conferencepaperpdf/index.htm?id=2718 (last visited 20.08.2014).
[88] For example, the shipping company Bore has been investing in energy efficient solutions, such as frequency converters, Rettig.fi, *Vår värld*, available at: http://www.rettig.fi/sv/om-oss/var-varld/ (last visited 20.08.2014).

ly improve the fuel efficiency of a vessel. The costs of installing such technical solutions are normally in the hands of the shipowner, but since the instalments leads to a reduction of the fuel consumption, it is a direct benefit for the charterer in a time charterparty.[90] Consequently, there is challenge for the owner to find incentives to invest in more efficient technical solutions if the vessel is only chartered out on a time charter. Charterers are generally not willing to participate in financing more efficient technical solutions on a vessel, as they are of the opinion that this task shall remain with the shipowner.[91] The picture is slightly different in case the shipowner and the charterer have a close relationship and the vessel has been contracted for a longer period.[92] Investment clauses could then be drafted so that both parties would share the costs of installing more efficient technical solutions. A powerful charterer can demand detailed information from the shipowner about the fuel consumption and thereby force the shipowners to improve their vessels in order to win a tender. Consequently, the charterer would benefit from lower fuel consumption, and the shipowner would have a more competitive vessel on the market.

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[89] Stena Line has changed propeller blades in order to reduce their fuel consumption. Bruce Peter, *Experiencing the new Stena Superfasts*, available at: http://www.knudehansen.com/media/43652/feb._20-2012small.pdf, last visited 20.08.2014.
[90] Slow steaming ahead: the impact of economic conditions and environmental scrutiny, The Baltic, Winter 2012, available at: http://www.forumforthefuture.org/media-centre/slow-steaming-ahead-impact-economic-conditions-and-environmental-scrutiny (last visited 19.10.2014)
[91] These views have been collected during interviews during summer 2014 with various Finnish charterers, notes with the author.
[92] A long period shall here be considered around 10 years.

4 NOTICE OF READINESS

4.1 Introduction

In order to improve the efficiency of charterparties, the focus will firstly be on a concept, which is used in practice and is well established. In the dry bulk segment, the most common voyage charterparty[93] is said to be GENCON 94.[94] As a result from collecting voyage charterparties from Finnish practitioners, the same conclusion could be made.

Voyage charterparties normally determines when the liability for delay shift from the shipowner to the charterer. In GENCON 94 the point in time is determined by the laytime clause and when the master has given a valid notice of readiness.[95] This concept originates from a time when it was not possible to exactly determine when the vessel would arrive at a port. Due to economic reasons, the shipowner usually performs the voyage as fast as they can in order to shift the risk for delay to the charterer by giving a valid notice of readiness. This behaviour will be referred to as the vessel is "rushing to a port" with full speed.[96] Due to modern technology, such as AIS, the notice of readiness concept could perhaps be more efficient. In order to establish solutions, the system will first be scrutinized.

4.2 Voyage charter

A voyage charter means that a specific cargo can be transported from A to B for a specified price per ton.[97] Consequently, shipowner agrees to perform one or more voyages and in return for freight. The freight rate is calculated per unit of shipped cargo and the shipowner normally pays for all the costs and consequently takes both the operational and commercial risk.[98]

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[93] Edgar Gold, Gard Handbook on P&I Insurance, 5th Edition, Royle Corporate Print, London, 2002, p.320.
[94] GENCON is a BIMCO standard charter form. GENCON drafting notes, i-law.com. http://www.i-law.com/ilaw/doc/view.htm?id=131935, last visited 05.08.2014
[95] Wilson, 2010, p.58.
[96] Erik Røsæg, A system for queuing in ports, 25.10.2010, Available at SSRN: http://ssrn.com/abstract=1697404, (last visited 21.09.2014), p. 3.
[97] Yvonne Baatz, *Maritime Law*, Sweet & Maxwell, London, 2011, p.176.
[98] Stopford, 2009, p.242.

As a result, the shipowner has the risk of delivering the vessel to the port of destination in time. When the master has given a notice of readiness and indicated that the vessel is ready to discharge, the risk is transferred to the charterer, which has the risk of loading and discharging the vessel. In case the vessel has not completed the loading procedure within the laytime, the charterer is obliged to pay a demurrage payment to the shipowner. If the agreed period has not expired when the loading process is over, the charterer can sometimes submit a claim for despatch from the owner.[99]

4.3 Laytime and Notice of Readiness

During laytime,[100] the shipowner is obliged to keep the vessel at the port, ready to receive cargo at any time. Laytime can be calculated in different ways. For instance, it can be specified in the charterparty as a number of days together with a definition of the kind of days.[101] It is normal to exclude holidays and days where the weather could damage the cargo. The parties can also determine laytime by stating a speed time for loading the cargo or include a "fast as can" clause.[102] These types of clauses are not recommended since they quite often leads to disputes.

When laytime has expired, the demurrage period will start and the shipowner is entitled to a special remuneration as a compensation for the delay.[103] In case the discharging or loading procedure is completed before the laytime period has expired, the shipowner shall pay an agreed amount to the charterer, called despatch.[104] Consequently, the charterer has the risk of ensuring that the loading procedure is carried out within the laytime. On the other

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[99] Stopford, 2009, p.183.
[100] According to BIMCO, laytime is defined as "the period of time agreed between the parties during which the owner will make and keep the Vessel available for loading or discharging without payment additional to the freight." BIMCO, Special Circular No.8-10 September 2013, Laytime Definitions for Charter Parties 2013.
[101] Thor Falkanger *et. al*, *Scandinavian Maritime Law – The Norwegian Perspective*, Universitetsforlaget, 2011, p. 394.
[102] *Ibid*.
[103] Beckman, 1956, p. 117.
[104] BIMCO, Laytime.

hand, the shipowner has the risk of delay before laytime has commenced. In order for laytime to commence, generally three conditions shall be met.[105]

Firstly, the vessel must have become an "arrived ship"[106] at the specified port of loading.[107] The individual contract determines when the vessel has "arrived".[108] The charterparties are making a distinction between "berth charters" and "port charters". In a "berth charter" the vessel actually has to arrive to the agreed place of loading before laytime can commence.[109] Consequently, the owner bears the risk of delay in case it is not possible for the vessel to arrive to the agreed berth. On the contrary, in a "port charter", the charterer shall nominate a berth. If the berth is not available, laytime will nonetheless commence when the vessel has arrived in the customary waiting area, as long as the vessel is in the port area.[110] GENCON 94 is an owner friendly charterparty and the charterer bears the risk of congestion.[111] In GENCON 94 a notice of readiness can be given already when the vessel arrives to the port, even if it has to wait outside the loading port.[112] The Nordic Maritime Codes have determined that the vessel has to arrive to the place of loading.[113] Moreover, the vessel has to be ready to load the cargo and give a notice. The place of loading shall be defined in the charterparty.[114]

Secondly, the vessel has to be ready to receive cargo.[115] This means that the vessel has to be seaworthy. In addition, the vessel has to be as ready as she can be to load or discharge the cargo.[116] Thirdly, the vessel has to tender a notice of readiness when the vessel ar-

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[105]Falkanger et. al, 2011, p. 391-393.
[106] Falkanger et. al, 2011, p. 391.
[107] Wilson, 2010, p.58.
[108] Harvey Williams, *Chartering Documents*, 4th Edition, Sinclair Roche & Temperley, London Hong Kong 1999, p.23.
[109] "Berth charter" is the English/American approach, Falkanger et. al, 2011, p. 391.
[110] Falkanger et. al, 2011,, p. 391.
[111] GENCON 94, clause 6 (c) second paragraph.
[112] Falkanger et. al, 2011, p. 392.
[113] Article 14:12 (SMC, FMC) and Section 332 in the DMSA, NMC.
[114] Falkanger et. al, 2011, p. 392.
[115] *Ibid*, p.393.
[116] Trond Solvang, *Laytime, demurrage and multiple charterparties*, [2001] L.M.C.L.Q, p.286.

rives.[117] Normally, a notice of readiness can only be given when the first and the second requirements are fulfilled. If not specially agreed, the notice does not have to be in any special form; an oral notice of readiness could in theory be valid. [118]

When the notice has been given, the time starts to count in accordance with the specifications in the charterparty. The reason behind this system is to give the charterer, the shipper or the receiver time to prepare for loading and discharging. Especially in dry cargo shipping, this time is of utmost importance. Before loading can commence, stevedores and customs services might be required to receive an alert.[119]

4.4 GENCON 94; Notice of Readiness

GENCON is globally the most used general-purpose voyage charterparty.[120] GENCON was issued by BIMCO already in 1922 and since then only a few amendments have been made. In 1991, there was a greater support for reviewing GENCON. There was a consensus that the charterparty did not completely fulfil the industry's needs in all aspects. A Study Group scrutinised commonly used rider clauses and alterations used by practitioners. The BIMCO Documentary Committee followed the Study Group's recommendations and revised the charter.[121] Thus, BIMCO issued GENCON 94.

Clause 6 of GENCON 94 regulates the laytime and determines when a notice of readiness becomes valid. Due to the potential efficiency improvements connected to such a clause, the concept shall be further analysed.

The laytime clause first determines how the time shall be calculated. The parties can decide between either separating the loading and discharging time (a) or to calculate them together (b). Both alternatives state that the cargo shall be loaded or discharged within a limited

[117] Falkanger et. al, 2011, p. 393.
[118] H. Williams, 1999, p.21.
[119] H. Williams, 1999, p.22.
[120] GENCON, drafting notes.
[121] *Ibid*.

time during Monday-Saturdays, excluding holidays, as long as the weather permits it. The expression "unless used" means that if laytime has commenced, but loading or discharging activities are carried out outside the predetermined laytime period, such time shall count anyways.[122] One of the few alterations made in the 1994 revision was that the loading and discharging time is now specified within a number of days/hours, compared to the previous version where it was only referred to hours.[123]

Concerning the length of laytime, it is of great importance to specify how the days should be counted. It is common to either use SSHEX[124] or SSHINC[125] terms, but since holidays vary around the world, it is important to also define which holiday calendar is to be used for the specified charterparty. One way to specify this is to refer to the VOYLAYRULES 93,[126] which are not only defining the term "holiday", but also "working days" and "weather permitting day". However, these definitions are not specifying which national holidays are applicable. In order to determine that, the parties can refer to BIMCO's Holiday Calendar, which is updated every year.[127]

Sub-clause (c), describes the point in time when laytime actually commences. This section was partly revised by the BIMCO Documentary Committee in 1994. First of all, if notice of readiness is given up to and including 12.00 o'clock, then laytime shall subsequently start at 13:00 o'clock. Moreover, if notice of readiness is given after 13.00 o'clock, then laytime shall start at 06.00 am the following working day.[128] In practice, is quite common to change

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[122] VOYLAYRULES 93, Voyage charter party laytime interpretation rules 1993, issued jointly by BIMCO, CMI, FONASBA and INTERCARGO, available at: https://www.bimco.org/~/media/Chartering/Document_Samples/Sundry_Other_Forms/Sample_Copy_VOYLAYRULES_93.ashx (last visited 21.08.2014).
[123] GENCON, drafting notes, Forms & Documents, available at http://www.i-law.com/ilaw/doc/view.htm?id=131935, last reviewed 05.08.2014.
[124] Saturdays Sundays Holidays Excluded.
[125] Saturdays Sundays Holidays Included.
[126] VOYLAYRULES 93, Voyage charter party laytime interpretation rules 1993, issued jointly by BIMCO, CMI, FONASBA and INTERCARGO.
[127] BIMCO's Holiday Calendar, available at: https://bimco.org/Products/Shop/Holiday_Calendar.aspx (last visited 21.09.2014)
[128] GENCON, drafting notes.

sub-clause (c) in order to customise the times with the applicable ports of the voyage.[129] For instance, laytime could commence at 14:00 or 15:00 o'clock instead of 13:00 o'clock and at 08:00 or 07:00 o'clock the next working day instead of 06:00.[130] These are however only small adjustments, which do not reform the existing system for giving the notice of readiness.

4.5 Conclusion

GENCON 94 provides legal certainty for the parties, due to the great amount of established case law. The parties are free to make alterations to the standard form and adopt a set of rider clauses.[131] Consequently, what kind of alterations or rider clauses could the parties implement in order to make GENCON more efficient?

From my perspective, it would give the master more flexibility to reduce or increase the speed of the vessel, if a notice of readiness could be given as late as possible during the afternoon and not have 13:00 o'clock as the default rule. However, in order to affect a later deadline, the ports need to be willing to have longer working hours. The port systems and the rather inflexible working hours of the stevedores, have led to an inefficient structure of the shipping industry. A practitioner stated during an interview that the inflexible way of working of the stevedores and the ports are making the Finnish export industry much less competitive compared to other locations in the Baltic Sea where ports generally have a more flexible approach.[132] It has been suggested that, if stevedores would work in more flexible shifts or in other ways operate in a more efficient manner, it is more likely that when approaching the port vessels instead of rushing to a port, would reduce the speed since they have more flexibility.

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[129] Discussed notice of readiness clauses during interviews with shipowners and charterers in connection with the REBUS project. Notes with the author.
[130] These examples are taken from real GENCON 94 forms including rider clauses I have received from Finnish charterers and shipowners.
[131] Falkanger *et. al*, 2011, p. 369.
[132] REBUS meetings and interviews during summer 2014. Notes with the author.

The "rush to port" pattern derives from the contractual structure, where the difference between arriving at 11:00 and 12:30 can have major monetary consequences for the shipping company due to the unnecessary waiting time in the port. According to practitioners, the laytime and notice of readiness concept cannot be changed unless the port operations are changed as well. The ports are operating on demand, but on predetermined hours and consequently require the early notification. It is therefore difficult to completely reform the notice of readiness system without involving the ports and stevedoring companies in the discussions. In order to change the working pattern of stevedores, the union should preferably be involved and have a positive attitude towards a reform. The Transport Workers' Union (AKT) is representing the Finnish stevedores and as seen in June 2014, they are powerful and their attitude and decisions have a great influence on the Finnish export industry.[133]

To conclude, even if it seems easy to increase the time span for giving a notice of readiness, this will not be successful unless also the port operators are willing to become more flexible with their working hours. Until then, the parties can decide to incorporate virtual arrival agreements, which targets the unnecessary waiting time in a port when there is a known congestion.

[133] Finland Times, Stevedores Strike paralyses ports, 12.06.2014, available at: http://www.finlandtimes.fi/business/2014/06/12/7602/Stevedores-strike-paralyses-ports (last viewed 27.08.2014).

5 SLOW STEAMING AND VIRTUAL ARRIVAL

5.1 Introduction

One way to increase the efficiency is to reduce the speed of the vessel, however, this is not a new innovation. During the 1970s, when the freight rate was low and the bunker prices were high,[134] many vessels started to operate at a slower speed, a more economical speed. Slow steaming became popular again as a consequence the financial crisis in 2008-2009.[135] For instance, Maersk started slow steaming on the route between the Indian Sub-continent and Asia and has thereby increased the voyage time from 35 days to 42 days.[136]

Operators are slow steaming generally due to two reasons, to reduce fuel costs and to cut emissions. Reducing speed can also be an efficient way to intentionally arrive later to a port of discharge due to an expected congestion. The urge to reduce speed has been a consequence of a volatile market and increased bunker costs. Moreover, as a consequence of mandatory regulations, there might also be a need of purchasing more expensive bunker,[137] which additionally increased the economic burden for the operator. Slow steaming can also be considered as a tool to adjust a lower demand in transport and thereby continue to maintain a normal service, without laying up vessels.[138] According to INTERTANKO, if the speed of one typical VLCC route would be reduced from the normal service speed of 14,5 knots to the optimum laden speed of 9,7 knots, the fuel costs would be reduced from USD 2.2 million to USD 935,000. The extension of the voyage to 49.2 days from the original 34.5 days would not have a negative impact on the net gain for both parties.[139] Consequently, there is a lot to gain on slow steaming. Draft clauses for both voyage and time charterparties have been enacted by BIMCO and will be assessed in this chapter.

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[134] Stopford, 2009, p.156.
[135] Neil Henderson, *The Price of Slow Steaming,* available at: http://www.stonechambers.com/download-documents/articles---the-price-of-slow-steaming---neil-henderson.pdf (last visted 12.08.2014).
[136] Henderson, 2012.
[137] Kontovas & Psaraftis, 2011, p.313.
[138] Henderson, 2012.
[139] Corbett, 2012.

Virtual Arrival clauses are associated with the problem of congested ports. The most common port system is the First Come First Served (FCFS) system, which determines the position in the queue by the time of arrival of the vessel.[140] However, this system encourages the vessels to proceed with full speed during the whole voyage in order not to lose unnecessary time. However, in busy ports, the vessel might be forced to wait in the port before discharge or loading can begin. This system is neither beneficial for the environment nor from a commercial perspective.[141] Some ports have introduced voluntary programmes in order to reduce the speed of the vessels entering the ports. For example, Newcastle in New South Wales in Australia has introduced a Virtual Arrival Scheme[142] to effectively manage congestion. Moreover, Long Beach and Los Angles is giving a 15 % discount in the harbour fees, if vessels are reducing the speed to 12 knots in the area of 40 nm of the port.[143] The monetary compensation is probably the main reason why this programme has been so successful.

The aim is not to propose alternatives to FCFS or other port incentives, but to highlight contractual adjustments the parties could agree to in order to increase their profit and at the same time reduce CO_2 emissions. INTERTANKO[144] and BIMCO[145] have developed virtual arrival clauses for voyage charterparties, with the intention to balance the compensation between the charterer and the shipowner. It shall be clear that Virtual Arrival clauses are not the same as slow steaming clauses.[146] The main difference is that Virtual Arrival claus-

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[140] Røsæg, 2010, p. 3.
[141] *Ibid*.
[142] Ron Soresen, *Notice in relation to the continued implementation of Newcastle port corporation vessel arrival system*, available at: http://www.newportcorp.com.au/client_images/912600.pdf (last visited 04.10.2014).
[143] The Port of Long Beach, *Green Flag Incentive Program*, available at http://www.polb.com/environment/air/vessels/green_flag.asp (last visited 24.09.2014).
[144] Intertanko, Emissions reduction clauses, available at: http://www.intertanko.com/Topics/Legal-and-Documentary-/INTERTANKO-Model-Clauses/INTERTANKO-Model-Clauses1/Documentary-Committee-launches-model-INTERTANKO-Emissions-Reduction-Clauses/ (last visited 04.10.2014)
[145] BIMCO Virtual Arrival Clause for Voyage Charter Parties, BIMCO Special Circular, No.9, 4 October 2013.
[146] *Ibid*.

es are focusing more on instructing the master to arrive to a port at a specific time than just to reduce the speed of the vessel. Additionally, in order for such clauses to be successful, all stakeholders, such as terminal operators, port authorities, receivers and shippers, involved in the voyage are required to embrace the concept.[147]

5.2 Time charterparties

5.2.1 Introduction

For a shipping company that is still interested in managing the vessel, but not having the operational control, a time charter is preferable.[148] The vessel can be hired out for a few months or years (period charter) or for one specified voyage (trip charter). The charterer makes the commercial decisions, but the shipowner is still responsible for employing the crew and paying the ordinary running costs.[149] However, the charterer shall pay the voyage specific costs such as bunker, cargo handling costs and port fees.[150] The hire is specified as a fixed monthly or daily payment.[151]

Even if time charters are simple in theory, in practise it is more complex.[152] The charterparty sets out the specifications of the agreement, where the speed of the vessel, cargo capacity and fuel consumption shall be stated by the shipowner. The charterer is not obliged to pay hire when the vessel is on off-hire.[153] Consequently, the risk is divided between the parties. The shipowner takes the operational risk and the charterer has the commercial risk and will be obliged to pay hire independently if there is a demand for the vessel's services or not.[154]

It is common that the shipowner is obliged perform a voyage with reasonable despatch and not to deviate from the usual route. This has been inserted in the charterparties in order to

[147] BIMCO Virtual Arrival Clause for Voyage Charter Parties.
[148] Stopford, 2009, p.184.
[149] Eds, Julian Cooke, et al; *Voyage Charters*, 3rd Edition, 2007, p.3.
[150] Cooke *et al*. 2007, p.3.
[151] Stopford, 2009, p.242.
[152] *Ibid*. p.184.
[153] *Ibid*. p.242.
[154] Cooke *et al*. 2007, p.3

ensure the cargo owner that the goods are timely loaded and discharged. It has been discussed if due despatch can nowadays be interpreted to include both a commercial and environmentally sound speed.[155]

As the charterer has the commercial control of the vessel, the charterer controls whether the vessel shall slow steam or not. In addition, since the shipowner is not responsible for paying the bunker costs and port charges, the shipowner has no economic incentive to reduce the bunker consumption. Thus, the owner will normally not interfere in such decisions since freight is payable for the complete period.[156] However, it is of importance that the charterer is not abusing its power and consequently damaging the engines by instructing the master to reduce the speed below a recommended RPM. In order to avoid such issues, an appropriate clause should be agreed upon between the parties and included in the applicable charterparty.

5.2.2 Speed and consumption

In almost all time charterparties, there is a clause on speed and consumption, where the owner is guaranteeing a fuel consumption at a specified speed or RPM.[157] In the dry cargo sector, the most commonly used phrase derives from NYPE 46 and states that the vessel is to be ”capable of steaming, fully laden, under good weather conditions about … knots on a consumption of about … tons of fuel”. [158]

In order to illustrate how a speed and consumption clause with a focus on slow steaming could be drafted in practise, an example has been taken from an actual charterparty.[159] First of all, by stipulating the economic speed and the corresponding consumption, the charterer is informed about it and can take a calculated decision.

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[155] Røsæg, 2011, p. 115.
[156] *Ibid*.
[157] H. Williams 1999, p. 65.
[158] *Ibid*, p.66
[159] See appendix B.

"ECO SP/CONS: 12 KNTS ON ABT 23.5 MT IFO M/E […]"[160]

The speed and consumption clause can also specify what kind of fuel is preferred. In the event that the specified fuel is not available, the secondary option can be used, subjected to the approval of the shipowner.

"FOR IFO: RMG380 ALTERNATIVE RMH380 WHEN RMG380 IS NOT AVAILABLE BUT ALWAYS OBTAINING OWNERS PRIOR APPROVAL" [161]

Furthermore, this example also includes a reminder that the parties have to adhere to laws and regulations applicable to the vessel and the specific trading area.

Moreover, an eco-setting/guidance was included in the clause. The shipowner was to confirm that the vessel could be able to proceed at the reduced speed/RPM as has been determined, in order to avoid claims as a consequence of machinery damage. Furthermore, the shipowner is also under the obligation to ask their head owners for permission, in order to ensure that the vessel is allowed to perform at the economical speed. The speed of 12 knots is based on calculations made by the shipowner technical department. Finally, the last paragraph was included in the clause to ensure the shipowner that the charterers will not be able to make a performance claim against the shipowner and that the vessel's performance will only be checked against the vessel's description. Otherwise, the charterer could make an attempt to claim for damages due a breach of the due despatch obligation.

5.2.3 The shipowner decides to slow steam

In a time charterparty, the shipowner will receive the same amount of hire irrespective wheatear or not the vessel is slow steaming. Nonetheless, the shipowner is responsible for ensuring that the vessel can perform in accordance with the performance warranty, inserted

[160] Explanation: Eco speed and consumption: 12 knots on about 23.5 metric tons intermediate fuel oil main engine.
[161] RMG380 and RMH380 are different types of fuel oil.

in the charterparty. A shipowner could perhaps be interested in slow steaming due to marketing reasons. Even so, none of the standard clauses on slow steaming in time charterparties have focused on giving the shipowner the right to decide if the vessel shall slow steam.

Nonetheless, there are situations where the shipowner has determined to reduce the speed of the vessel. The consequence of such a decision shall be analysed by assessing the *Pearl C*[162] case where the shipowner took the decision to slow steam. The *Pearl C* case is based on an amended NYPE charterparty from 2006 and English law. Due to the absence of any Nordic case law on this matter, it will most probably be of importance in the Nordic countries as well.[163] In essence, the case identifies the performance warranties as the relevant yardstick against which one can measure slow steaming.[164]

The applicable charterparty contained a performance warranty of about 13 knots, which was to be applied in regards of the delivery of the vessel. The voyage was to be performed with "utmost dispatch"[165] in accordance with clause 8 of NYPE. The charterer was not satisfied with the owner's performance since the owner had reduced the speed without consulting the charterer. The charterer withhold some of the hire stating that the vessel had underperformed due to slow steaming and consequently breached clause 8 and was therefore entitled to deduct hire. The tribunal did not find that there was a breach of the on-delivery performance warranty. However, they were of the opinion that the shipowner had breached the "utmost dispatch" obligation and stated that the performance warranty, of 13 knots, should be used as the appropriate benchmark for the performance of the vessel. The Appeal court concurred.

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[162] *Bulk Ship Union SA v Clipper Bulk Shipping Ltd* (The "Pearl C") [2012] 2 Lloyd's Rep. 533.
[163] Mette Rosholm, Charlie Karlsson, *Slowsteaming*, Newsletter February 2013, available at http://www.gorrissenfederspiel.com/GFKNyheder/Files/Dokument1DK%5C305.pdf, last visited 20.09.2014.
[164] Neil Henderson, Tom Burdass, Slow Steaming: *Bulk Ship Union SA v Clipper Bulk Shipping Ltd (The "Pearl C")* [2012] 2 Lloyd's Rep. 533, available at: http://www.stonechambers.com/download-documents/articles---slow-steaming-update---neil-henderson-and-tom-burdass.pdf , last visited 13.08.2014.
[165] *Ibid*.

The shipowner tried to use the "error in navigation" defence in the Hauge Rules,[166] which had been incorporated in the charterparty by the use of a paramount clause. Since the decision to slow steam was considered deliberate, the tribunal found that it was outside the scope of the defence. The Appeal court concurred with the tribunal's interpretation of the *Hill Harmony*[167] case,[168] which in essence means that the obligation of "utmost dispatch" is breached if the master does not decide to take the quickest or shortest route.[169]The decision to slow steam was not a consequence of an error or default, since there were no heavy weather forecasts or any obvious mechanical problems. Consequently, the most reasonable explanation must be that the decision was deliberate. In result, the charterer was entitled compensation for loss of time.[170]

The *Hill Harmony* case can be viewed in combination with the *London Arbitration 10/00* case, where the tribunal stated that if the ship had deliberately been slow steaming in order to reduce the fuel consumption, then it shall be considered as a breach of the due despatch obligation.[171] Consequently, a shipowner is no longer protected from a claim by making a reference to the performance warranty, which is only applicable to the last part of the voyage and not to the complete performance.[172]

To conclude, it is not recommended that a master deliberately decides to reduce the speed of the vessel, without agreeing upon it with the charterer.

5.2.4 The charterer decides to slow steam

The charterer is responsible for paying the bunker and is in control of the commercial decisions. It is therefore expected that the charterer has a motivation to slow steam. If the char-

[166] The Nordic countries have enacted the same defence in section 274 (DMSA, NMC) and paragraph 13:26 (FMC, SMC), stating that the carrier is not responsible for fault in navigation carried out by the master or the crew.
[167] *The Hill Harmony* [2001] 1 Lloyd's Rep. 147.
[168] *Bulk Ship Union SA v Clipper Bulk Shipping Ltd*, 534.
[169]Terence Coghlin *et al*, Time Charters, Informa Law from Routledge, Oxon, 6th edition, 2008, p. 327.
[170] Rosholm & Karlsson, 2013.
[171] Henderson, 2012.
[172] Henderson & Burdass 2012.

terer wants to so slow steam, it is recommended that an appropriate clause is agreed upon and incorporated in the charterparty.

BIMCO has drafted standard clauses on slow steaming, which can be used in order to ease the process of including such clause into a time charterparty.[173] The aim was to produce a sustainable clause with a fair balance between the charterer's right to control the speed of the vessel and the shipowner's concerns about the consequences of slow steaming. The legal aspects primary relate to the shipowner's obligations to follow the instructions to slow speed and at the same time make sure the instructions are not contradicting with any obligations towards third parties or compromising the vessel's safety. [174] During the period of this master thesis, BIMCO is in the process of publishing a new version of NYPE, the most common time charterparty for dry cargo shipment,[175] where the complete slow steaming clause has been implemented. In the event NYPE 2014[176] will be widely used, there is a need to analyse the implications and consequences of such a slow steaming clause.

5.2.5 The BIMCO slow steaming clause implemented in NYPE 2014

The first version of NYPE was published in 1913. Before the current revision, the charterparty has been revised in 1921, 1931, 1946 and in 1993.[177] Until today NYPE 46 is still used by practitioners even if NYPE 93 is more common. The shipping industry does not change rapidly. ASBA took over and produced "ASBATIME" in 1981, however, the market continued to use NYPE 46. As a consequence, ASBA decided to work together with BIMCO and FONASBA, and together the organisations undertook a general revision of NYPE 46 and published the 1993-version.[178]

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[173] BIMCO, Slow Steaming Clause for Time Charter Parties, 2011.
[174] *Ibid*.
[175] Drafting Notes to NYPE 93, BIMCO Bulletin No. 6, 1993.
[176] It shall be noted that the version is called NYPE 2014 or NYPE XX but hereinafter, I will refer to it as NYPE 2014. BIMCO, A comparison between NYPE 93 and NYPE 2014, from 16.07.2014, available at: https://www.bimco.org/~/media/Community/Webdialog/2014_Revision_of_NYPE/NYPE_93_v_NYPE_2014_comparison.ashx?RenderSearch=true (last visited 20.08.2014).
[177] BIMCO, drafting notes NYPE 93.
[178] *Ibid*.

By only briefly describing the history of NYPE, one can quite easily notice the unwillingness of the industry to change to a more modern version of a standard charter party form. The continuous strong position of NYPE 46 can for instance be exemplified by the usage of the 1946 version of NYPE in the *Athena* case[179] from 2013. Even if the 1993 version has not gained monopoly after 20 years in practise, there was a need of a reform. NYPE 2014 is currently under revision and on a good way to be adopted during 2014.[180] The main objectives of the current revision of NYPE is to add completely new and updated versions of various standard clauses, as an attempt to reduce the number of rider clauses used by practitioners.[181] The early reviews have so far been extremely positive so even if changes can still be made, the current version shall be of great use until the final version is adopted.[182]

One of the new standard clauses that have been implemented in NYPE 2014 is the BIMCO's slow steaming clause. Consequently, a more thorough assessment will be carried out on those clauses affecting the slow steaming clause regime in order gain a better understanding of the functions and potential concerns the clause could have on the parties.

5.2.5.1 Performance of Voyages - Clause 8

In NYPE 2014, the voyage performance is regulated in clause 8.[183] The main rule is that the "Master shall perform the voyages with the utmost despatch".[184] This can be compared with the NYPE 93 where the term "due despatch" was used. The difference between the two concepts will not be further discussed since it is not likely that there will be a great

[179] Minerva Navigation Inc v Oceana Shipping AG (The "Athena") [2013] EWCA Civ 1723.
[180] BIMCO, *Hear about the new NYPE C/P at free London Seminar on 16 June*, 28.05.2014, available at: https://www.bimco.org/news/2014/05/28_free_nype_seminar_london_16_june.aspx (last visited 20.08.2014).
[181] Time for NYPE 93 charter revision, 30.07.2012, http://www.allaboutshipping.co.uk/2012/07/30/time-for-nype-93-charter-revision/, last visited 06.10.2014.
[182] BIMCO, Industry Invited to comment on updated NYPE charter, available at: https://www.bimco.org/News/2014/06/30_Industry_invited_to_comment_on_updated_NYPE_charter.aspx?RenderSearch=true (last visited 20.08.2014).
[183] See appendix C.
[184] Clause 8, NYPE 2014

difference in practice.[185] The Slow Steaming Clause is applicable to the voyage if it has been "ordered by the Charterers in accordance with Clause 38 (Slow Steaming Clause)."[186]

5.2.5.2 Speed and Performance - Clause 12

Clause 12 of NYPE is a performance warranty.[187] The shipowner guarantees that the vessel is capable of maintaining a specified speed with a daily consumption during good weather conditions.[188] There are some exceptions mentioned. The shipowner is not obliged to follow the performance warranty if slow steaming is agreed between the parties or if a reduced speed is required due to safety reasons. Such circumstances shall be excluded from the performance calculations. As was stated in the discussion in section 5.2.3, in connection with the *Pearl C*-case, the performance warranty shall be used as a yardstick when the performance of the vessel is disputed. In the second part of clause 12, it is stated that the charterer shall have the option to use their preferred weather routing monitoring system. The master is not obliged to follow the information deriving from the system, but the master is obliged to comply with the reporting procedure.

5.2.5.3 Slow Steaming Clause - Clause 38

The first part of clause 38[189] describes the procedure of slow steaming. The general idea of the clause is that charterer has the option to instruct the Master, who is employed by the shipowner, to either reduce the speed of the vessel, the RPM and/or adjust the vessel's speed in order to arrive at a specified time to the predetermined port. However, "specified time of arrival" shall not be interpreted as a warranty for the owner to arrive at a specific time, it shall only be considered to be an indication of the owner's intention.[190] The clause specifies a minimum speed the shipowner shall not deviate from; however, the minimum

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[185] Coghlin *et al*, 2008, p.328.
[186] Clause 8, NYPE 2014.
[187] See appendix C.
[188] Good weather conditions are defined as wind up to force 4 Beaufort Scale and sea state up to and including Sea State three (3) as per the Douglas Sea Scale (unless otherwise specified in Appendix "A").
[189] See appendix C.
[190] BIMCO, Slow Steaming Clause for Time Charter Parties, 2011.

requirement shall not be constituted as a speed order.[191] Consequently, there is a level of uncertainty for the charterer regarding the time of arrival.[192] In order to avoid uncertainty, the charterer's instruction to reduce the speed of the vessel shall be submitted in writing.[193] The fact that the instruction is given in writing will probably reduce the number of disputes. However, if the charterer would like to reduce the speed of the vessel, but the master has not received the instructions due to a technical failure, it could be unclear if an oral instruction would be enough to trigger a slow steaming event. Moreover, it is also unclear if the shipowner is liable for the extra bunker costs when the vessel was not slow steaming even if the charterer has given an instruction.

The clause is structured in a two-tier manner, with the option of (i) "Slow Steaming" and (ii) "Ultra-Slow Steaming", depending on the parties' needs. "Slow Steaming" entails a speed which will not require any modifications on the engines, since the engines will continuing to operate above the cut-out point for the vessel's engine's auxiliary blowers. Until this level, the engines will not be damaged by a speed reduction. Most shipowners would allow reducing the speed within this "zone".[194] "Ultra-Slow Steaming" provides a slower speed, which allows a speed below the cut-out point for the auxiliary blowers. The engines might have to be modified in order successfully perform at such low speed. The first option is the default rule and the parties have to expressly agree in order for "Ultra-Slow Steaming" to apply.[195] This protects the shipowner from unforeseen engine damages.

Clause 38 (a) of NYPE 2014 is subject to the Master's right to reject instructions given by the charterer, in case it would be contrary to the master's obligations in respect of the "safety of the vessel, crew and cargo and the protection of the marine environment". Technical issues, connected to the engine, could also be a reason for the master to reject the request.

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[191] Steamship Mutual, Slow Steaming, November 2013, available at: http://www.steamshipmutual.com/publications/Articles/SlowSteaming1113.htm (last visited 19.10.2014)
[192] The Charterers P&I Club, Circular 001/2012, p.2.
[193] BIMCO, Slow Steaming Clause for Time Charter Parties, 2011.
[194] *Ibid*.
[195] The Charterers P&I Club, 2012, p.1.

The master has an obligation to follow the manufacturers' and designers' recommendations for the engine and equipment. Consequently, the master shall refuse the charterer's instructions to slow steam under a certain speed, if a certain speed or RPM would be outside the recommendations "from time to time". "From time to time" has been included in order to protect the owners from unforeseen expenditures, after the date of signing the charterparty.[196] However, the clause has not considered situations, when the vessel is no longer capable of performing at its usual speed due to a prolonged slow steaming.[197] Consequently, an owner might evaluate if an express indemnity clause should be incorporated in order to have a better protection against possible claims due to a breach of the performance warranty.

Clause 38 (b) and (c) is on the other hand covering the more "soft" parts of the clause and not the procedure of slow steaming. In general, the owner shall operate the vessel with the aim to reduce the fuel consumption. Slow steaming does not have to be agreed upon before the commencement of the voyage, it can also be decided after departure.[198] Moreover, even if it has been agreed upon that the vessel shall slow steam, all speed and consumption warranties are applicable. However, if the charter has requested the vessel to reduce the speed below any warranted speed, it falls outside the performance guarantee.[199]

The master's obligations are further described in clause 38 (c). For instance, the master shall use the charter's performance monitoring system. These devices are used in order to avoid any potential corruption with the vessel's own monitoring system. Some owners can be reluctant towards accepting such equipment, unless the systems are restricted towards reporting on only the slow steaming facts.[200] If this becomes a bigger problem, one suggestion is to alter the clause and instead appoint an independent third party that is responsible for monitoring the performance. Clause 38 (d) is inserted in order to encourage the parties

[196] BIMCO, Slow Steaming Clause for Time Charter Parties, 2011.
[197] Wortley 2012.
[198] BIMCO, Slow Steaming Clause for Time Charter Parties, 2011.
[199] *Ibid*.
[200] *Ibid*.

to cooperate towards finding various solutions to improve the vessels energy efficiency. However, this is not an obligation.

Clause 38 (e) states that as long as the master is exercising due diligence and following the charterer's instruction, the compliance with such instruction shall not constitute a breach of the due despatch obligation. Moreover, clause 38 (f) obliges the charterer to ensure that the shipowner will not be held liable for complying with the instruction to slow steam, even if it would be contrary to an obligation in a bill of lading issued by the master. The preferred solution would be to incorporate the slow steaming clause into all bills of lading but this is probably not realistic due to the great amount of various stakeholders, all with their own standard form. Thus, it is difficult to coordinate and impose such alterations. The charterer shall consequently indemnify the shipowner against potential claims deriving from an obligation to proceed with due despatch in a bill of lading. For liner trade, neither (e) nor (f) is applicable. [201]

5.2.6 Conclusion

Slow steaming has been quite controversial. In regards of technical matters, slow steaming could cause problems since different lubricating oils might be needed and the crew might be in the need of training.[202] If a vessel's engine is not optimized for a slower speed, it might increase the need of maintenance. Maintenance could cause irregularities in the schedules and a higher demand for additional vessels during the additional maintenance periods.[203] However, so far, it is the general impression among hull underwriters that slow steaming has not increased the frequency of main engine damages.[204] This is probably due to a combination of decreased load on the engine and compliance with recommendations from engine makers on how to operate on reduced loads.[205]

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[201] BIMCO, Slow Steaming Clause for Time Charter Parties, 2011.
[202] Henderson, 2012.
[203] Røsæg, 2011, p. 106.
[204] Karl Petter Muhlbrandt, lecture on Engine, Propulsion and Maintenance, 23.10.2014. Notes with the author.
[205] *Ibid*.

To conclude, BIMCO's slow steaming clause is rather long but should generally provide a good protection for the shipowner, as long as the indemnity clause will be accepted by the applicable court. Moreover, the clause is also most likely going to be welcomed by charterer due to the increased bunker costs.[206] What is not regulated in the clause is a split of bunker savings between the parties - an element that has been dealt with in the virtual arrival clauses discussed in section 5.3.4.

5.3 Voyage charterparties

5.3.1 Introduction

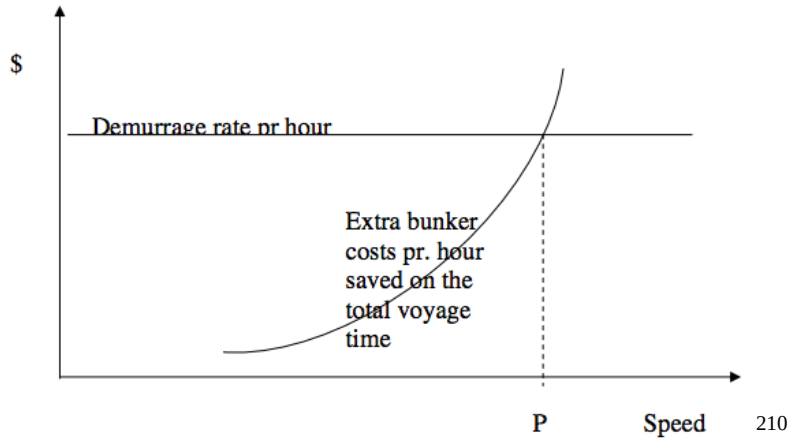
In a voyage charter, the decision making power over the performance of the vessel is divided between the charterer and the shipowner. The shipowner is responsible for paying for the fuel and the charterer pays freight for the vessel to load and discharge at named ports. If the bunker consumption would be reduced, the shipowner could maybe offer a lower freight.

The shipowner, who is in charge of paying the fuel, might be interested in slow steaming, but the charterer might then insist on continuing with due despatch, due to its obligations towards cargo owners.[207] It is of importance to identify when the risk of delay is transferred from the shipowner to the charterer. Once the notice of readiness has been given, the charterer will be responsible for ensuring that the vessel is loaded or unloaded within the laycan period. If the charterer is not capable of performing in accordance with the contract, the shipowner is entitled to a demurrage payment. Consequently, a shipowner is eager to reach

[206] Sally-Ann Underhill, *Proposed changes to the NYPE form*, Standard Bulletin, September 2014, available at: http://www.standard-club.com/media/1438091/standard-bulletin-september-2014.pdf,last visited 29.10.2014.
[207] Røsæg, 2011, p. 115.

the port as soon as possible in order to transfer the risk of delay to the charterer. Even if slow steaming would decrease the shipowner's bunker expenses, it might not be enough.[208]

The marginal bunker costs are normally considered to grow exponentially with the speed of the vessel and the demurrage rate is predetermined at a flat rate, for instance 5,000 US Dollar/day. Consequently, the more the owner increases the speed, the higher the cost per hour saved on time total is likely to be. Thus, as long as the additional costs are less than the demurrage rate, an earlier arrival will lead to an increase demurrage payment and the shipowner will receive his money back. If the speed is above "P", the extra bunker costs cannot be recovered from the increased demurrage payment. The shipowner will most likely intend to find the speed P.[209] Consequently, due to the demurrage system, the shipowner might perform the voyage with full speed in order to obtain a maximum benefit. The demurrage payment has to be taken into account when drafting slow steaming clauses.



[210]

5.3.2 Speed and consumption

In voyage charterparties, the rules on the vessel's speed and consumption are generally not as clear as in time charterparties.[211] Consequently, disputes regarding performance warran-

[208] Røsæg,2011, p. 116.
[209] *Ibid*.
[210] Røsæg, 2010, p. 13.
[211] Henderson, 2012.

ties are quite difficult to solve due to the absence of specific performance figures in the contract.[212] An unpublished policy for slow steaming applicable for the whole shipping company could be the basis for claiming a breach of the due despatch obligation, unless the policy is brought to the attention of the charterer before the contract is signed and the policy has been reflected in the price.[213]

5.3.3 The owner decides to slow steam

In order not to change the normal balance between the shipowner and the charterer, the BIMCO slow steaming clause for voyage charterparties[214] only entitles the shipowner to order the vessel to slow steam. The drafters focused on balancing the technical impact on the engines with the commercial need for reducing bunker costs. This clause takes into account which party is paying for the bunker costs and who is having control of the vessel's movements.[215] The shipowner is only given a restrictive freedom to reduce the speed and is limited to a predetermined speed. The charterer and the shipowner shall in cooperation decide what the minimum speed shall be. Since it is the owner that is responsible for bunker costs, the charterer cannot claim the shipowner for not reducing the speed of the vessel. According to BIMCO, the issue of due despatch has been solved by clarifying that the decision made by the shipowner to slow steam will not be a breach of any other contract. Consequently, the charterer is obliged to indemnify the shipowner against any claims from cargo owners for breach of contract as a consequence of a delay.[216] These issues will be further discussed in section 5.4.

5.3.4 The charterer decides to reduce speed

A standard clause giving the charterer the right to slow steam has not been found, however, BIMCO and INTERTANKO[217] have developed Virtual Arrival clauses, which focuse on

[212] Henderson, 2012.
[213] *Ibid*.
[214] BIMCO, Slow Steaming Clauses for Voyage Charter Parties, 2012.
[215] Rosholm & Karlsson, 2013.
[216] BIMCO, Slow Steaming Clauses for Voyage Charter Parties, 2012, p.4.
[217] INTERTANKO, Emissions reduction clauses.

improving the efficiency of the voyage in situations where the vessel is reaching a congested port in full speed.

5.3.4.1 INTERTANKO – Virtual Arrival Agreement / Emission Reduction Clause

INTERTANKO's emission reduction clause is an agreement between the shipowner and the charterer, with the aim to reduce the speed of the vessel and agree on a new time of arrival in case there will be a delay in the following port. In order to make the agreement attractive for both parties, the shipowner shall be compensated for the lost time, by referring to the demurrage rate. The agreement also provides for a solution where the saved bunker costs are shared between the shipowner and the charterer.

According to INTERTANKO, it would be inappropriate to only recommend one charterparty clause and the parties are encouraged to develop their own clauses.[218] INTERTANKO have nonetheless produced two model clauses, one intended as a pre-voyage agreement and the other for a post-voyage analysis.

5.3.4.1.1 Pre-voyage agreement

In the first version,[219] the charterer can request the shipowner to reduce the speed to either a specific average speed or state that the vessel shall not arrive at the port before a specified time. The shipowner may either; refuse such a request based on reasonable grounds or accept it by giving an estimation of the additional steaming time, specifying bunker savings and attach the last bunker invoice to the charterer.[220] Thus, the advance calculation of the bunker savings is carried out without the involvement of a third party. The charterer can, based on this information, decide whether or not the estimates are acceptable. In case the charterer agrees, the owner will instruct the crew to follow the charterer's request.

[218] Guidance can be found in Appendix A – *Issues for Consideration by Parties Entering into a Virtual Arrival Agreement*, OCIMF, Virtual Arrival, 2010, p.11.
[219] See appendix D.
[220] *Ibid*., subparagraf 2.

A clear benefit of this clause is that the sums are agreed upon before the decision to reduce the speed has been taken.[221] As long as the estimations are not far from the reality, this system should be an efficient way to avoid disputes. The word "estimate" could be replaced by "demand" in order to avoid situations where the disadvantaged party challenges the estimation.[222]

A potential issue connected to this clause could be the lack of definition of what constitutes "reasonable grounds". Safety reasons will always constitute a valid reason to refuse to follow the instructions to reduce speed. INTERTANKO suggest that a planned maintenance at a yard could authorise the shipowner to refuse the instructions.[223] Even if there are indications that this will not be a problem, the scope of "reasonable grounds" could be determined more in detail by INTERTANKO.

In this model clause, INTERTANKO suggest that the charterer shall compensate the shipowner for the additional steaming time, at the agreed demurrage rate. However, 50 % of the saved bunker costs shall be deducted from the compensation. Consequently, both parties will enjoy the benefit from the saved bunker costs. The parties can alter the percentage, but the default suggestion is to share 50/50.[224] Moreover, the charterer has an obligation to incorporate this clause into all applicable bills of lading and shall furthermore indemnify the shipowner for any potential claims deriving from the application of this clause.[225]

5.3.4.1.2 Post voyage analysis

In the second version,[226] the charterer is again entitled to instruct the shipowner to reduce the speed to a specified average speed or to determine when the vessel can arrive at a port. The wording differs slightly from the above clause, particularly in regards of situations

[221] Wortley, 2012.
[222] *Ibid*.
[223] Intertanko, Emissions reduction clauses.
[224] Appendix D, para 4.
[225] *Ibid*., para 5.
[226] See appendix E.

when the owner is entitled to reject the instruction. Similar to above, the shipowner can reject the instruction based on reasonable grounds, but the scope appears to be narrower than in the first clause. Consequently, the shipowner is only allowed to reject the instruction due to predetermined contractual obligations, or due to operational or safety reasons.[227] From the author's perspective, it is not clear if the shipowner could reject an instruction based on commercial reasons, such as future fixtures, agreed upon either prior to the commencement or during the voyage. Another difference is that the charterer can alter the instructions during the voyage, within the predetermined limits.[228]

The bunker savings are also equally shared, and the shipowner is compensated for delay in the same manner as above.[229] However, the procedure of calculating the delay is different. When the voyage has been completed, the master shall calculate the amount of extra time and the saved bunker costs. In this clause, the possibility of involving a third party has been suggested, and a Weather Analysis Service Provider (WASP) could calculate the total savings. During the development of the clause, some parties were criticising the use of a third party and there would be a risk that shipowners would not be interested in allocating the amount of control to a WASP.[230] Presently, the parties are not bound to use a WASP. However, it has not been established whether the master's calculations or the WASP's calculations have a superior impact, in case there are different findings.[231] It is quite likely that there will be disputes between the parties, with the master/shipowner on the one side and the charterer/WASP on the other.

5.3.4.2 BIMCO – Virtual Arrival Clause

The BIMCO Virtual Arrival clause[232] is intended to be incorporated when the shipowner is entitled to slow steam according to the charterparty. The Virtual Arrival clause shall con-

[227] Appendix E, para 1.
[228] *Ibid*., para 2.
[229] *Ibid*., para 3.
[230] Intertanko, Emissions reduction clauses.
[231] Wortley, 2012.
[232] See appendix F.

sequently be considered as a paramount clause in regards of the slow streaming clause.[233] The charterer is entitled to request the master to arrive at a specified time at a specified destination. Contrary to INTERTANKO's suggestions, the request shall be made in writing.[234] Similar to the INTERTANKO clauses, the shipowner has the possibility to reject the instruction, but only within reasonable limits.[235] The BIMCO clause further specifies that, situations where a speed reduction would affect subsequent fixtures, the charterer shall agree to amend the cancellation date under the voyage charterparty. As a consequence, the owner's exposure is reduced, in the event the vessel arrives after the original cancellation date.

The compensation structure is very similar to INTERTANKO's suggestion, with 50/50 as the default rule. However, the payment shall be made prior to the completion of the final discharge.[236] The early payment could decrease future disputes, as the parties have to agree on a sum at an early stage. The payment for the extra time the vessel needs in order to complete the voyage shall be mutually agreed. The extra time shall be calculated based on relevant information, such as the weather, speed, waves and technical data. In a case where the parties fail to agree, the parties shall mutually appoint an independent expert.[237] However, the appointment of the expert is not connected to the dispute resolution regime under the charterparty. The expert decision on the extra time used shall be binding.

BIMCO has identified the potential conflicting issues regarding the "utmost/due despatch" obligation. The problem seems to have been solved by stating that as long as the master is exercising with due diligence, the performance shall not breach the utmost despatch obligation. Furthermore, the charterer shall also ensure that the clause is incorporated in any transport documents and indemnify the owners again all potential claims, resulting from

[233] BIMCO Virtual Arrival Clause for Voyage Charter Parties, 2013
[234] *Ibid*., para (a).
[235] *Ibid*.
[236] *Ibid*.
[237] *Ibid*.

more onerous liabilities than those deriving from this clause. To conclude, BIMCO has chosen a very similar approach as INTERTANKO.

5.3.5 Conclusion

It is slightly more complicated to draft speed reduction clauses for voyage charterparties than for a time charterparty, due to the division of the functions between the parties. In order not to alter the relationship between the shipowner and the charterer, it is most likely preferred if it is only the shipowner that is allowed to make the decision to slow steam in a voyage charterparty.

A Virtual Arrival clause only affect a short period of the voyage and one could question how large effect and impact such clauses would have on the overall picture. Nonetheless, it will most likely be less controversial to incorporate a Virtual Arrival clause in to a voyage charterparty compared to a slow steaming clause, since both parties are most likely willing to adjust the speed in order to avoid a congested port. The three different clauses vary a bit, however, the sharing of the bunker savings 50/50 as a default rule can be found in all of them. As monetary disputes could arise, it might be wise to determine more in detail how the saved bunker costs shall be calculated or appoint a WASP or expert already before the voyage commences and insert the agreement into the charterparty. Even if the scope of the clause is limited, it will most likely have a positive effect on the communication and awareness of the parties on how much costs can be saved by slow steaming.

5.4 Bills of lading and third party interests

5.4.1 Introduction

The complexity of the shipping industry can be illustrated by the uncertainty of potential legal claims which the carrier can be subjected to. The cargo owner's interests are protect-

ed in the contract of carriage.[238]A transport document can have various forms, but the most common type is a bill of lading.[239] A bill of lading acts as evidence between the carrier and the shipper. The carrier be the shipowner, the charterer or a freight forwarder, depending on who has entered into a contract of carriage which the shipper.[240] The bill of lading becomes a contract when it is transferred to a third party. The third party will not be aware of the charterparty terms between the charterer and the shipowner,[241] unless the terms have been incorporated into the bill of lading. Consequently, the bill of lading transfers from receipt,[242] to a transport document in the hands of a third party.[243]The legal consequence of a bill of lading, obtained by a third party, is of particular interest since the carrier might become liable towards the third party.[244]

A bill of lading can be issued on behalf of the shipowner[245] ("owner's bill") or on behalf of the charterer ("charterer's bill"),[246] however, it can sometimes be difficult to determine if it is a charterer's or owner's bill if it is not clearly indicated who has issued it.[247] If it is an owner's bill, the master has signed it and the shipowner could also be the contracting carrier in excess of being the performing carrier. If the bill of lading has been signed on behalf of the charterer, the charterer is the contracting carrier and the shipowner will only act as the performing carrier. It varies from jurisdiction to jurisdiction, but the general approach under English law is that a cargo owner is only allowed to sue the contracting party under

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[238] Thor Falkanger, "The Incorporation of Charterparty Terms into the Bill of Lading," *Skrifter Utgivna Av Sjörättsföreningen i Göteborg* no.3 (1967-1968), p.64.
[239] R. Williams, *Gard Guidance to the Statutes and Rules*, Gard AS, 2008, p. 195.
[240] Mark Russel, *Gard Guidance on Bill of Lading*, last modified 15.03.2013, available at: http://www.gard.no/ikbViewer/Content/20651968/Gard%20Guidance%20bills%20of%20lading%20March%202011.pdf, last visited 18.09.2014, p.7.
[241] R. Williams, *Gard Guidance on Maritime Claims and Insurance*, Gard AS, 2013, p.88.
[242] Falkanger, *et al*, 2011, p.411.
[243] *Ibid*, p.261.
[244] Rosholm & Karlsson, 2013.
[245] According to for instance §295 NMC.
[246] Daygu Damar, *Wilful Misconduct in International Transport Law*, Springer, Heidelberg, 2011, p. 183.
[247] For example in: *The Starsin*[2004] 1 A.C. 715.

the contract, i.e. the contractual carrier.[248] The cargo owner could also sue the performing carrier, but then only under tort and not under the contract. According to the various Nordic Maritime Codes, the performing carrier is also under the obligation to perform the voyage with "due despatch" and this means that the cargo owner could sue the shipowner under the bill of lading in case of delay.[249] Consequently, it is important also for the shipowner to have control over potential legal liabilities they could be exposed to before entering into a virtual arrival or slow steaming agreement.

5.4.2 Incorporation problem

The main rule is that a provision in the charterparty, which is not incorporated in the bill of lading, cannot be invoked against a holder of a bill of lading[250] without a reference to the provision.[251] Consequently, if there have not been any indications of a slow steaming agreement in the bill of lading, the shipowner or the charterer might become liable towards the cargo owner. The purpose of an incorporation clause is to streamline the carrier's liabilities deriving from the bill of lading and in the charterparty. Courts have generally treated incorporation clauses with some scepticism,[252] and it is therefore not clear if an incorporated clause will be recognised by a court.[253]

In order to uniform the terms in the charterparty and the bill of lading, the charterparty clauses can be incorporated in the bill of lading by referring to the applicable charterparty.[254] However, the issue is that the cargo owner rarely has access to the applicable charterparty. Consequently, an incorporation is not sufficient by only making a general reference such as "charterparty terms and conditions incorporated herein" in the bill of lad-

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[248] Steamship Mutual, Non-Contractual Cargo Claims, 2003, available at: http://www.steamshipmutual.com/publications/Articles/Articles/Starsin_Non-Contract.asp, last visited 29.10.2014.
[249] Rosholm & Karlsson, 2013.
[250] Falkanger *et al*, 2011, p.412.
[251] Section 292 (3) NMC.
[252] Falkanger, *et. al.*, 2011, p.412.
[253] R.Williams, 2013, p.88.
[254] Falkanger, *et. al*., 2011, p.412.

ing.[255] It creates legal uncertainty for the third party holder of the bill of lading when the complete terms are not incorporated.[256] The third party might not be able to see the whole charterparty at any point in time and courts have consequently been protecting the cargo owners in situations where it can be difficult for them to obtain a complete understanding of their legal position.[257]

Courts might not recognise an incorporation clause due to mandatory legislation. Bills of lading are subjected to mandatory legislation, contrary to charterparties, and courts might not recognise an incorporation clause due the application of the mandatory rules.[258] Bills of lading are most often regulated by compulsory conventions, such as the Hague-Visby Rules, which are implemented into national legislations. Consequently, a clause in a charterparty, based on freedom of contract, might not be void in a bill of lading context due to the country's compulsory legislation.[259] For example, clause 2 of GENCON 94, provides that the owner will be liable for loss only if due diligence has not been carried out personally, implying that the management of the company has acted without due diligence. This clause is completely acceptable in the charterparty, but will be void in a bill of lading due to mandatory legislation.[260]

5.4.3 Mandatory nature in the Nordic Maritime Codes

In the Nordic countries, charterparties are subjected to freedom of contract[261] and contract of carriage of goods, in the form of a bill of lading[262] or sea waybill,[263] is subjected to mandatory legislation.[264] The difference is clearly indicated by separating the rules into separate

[255] Russel, 2013, p.10.
[256] Thor Falkanger, 1968, p.73.
[257] Falkanger, *et al.*, 2011, p.412.
[258] R.Williams, 2013, p.88.
[259] *Ibid*. p.89.
[260] Article III Rule 8 of the Hague-Visby Rules.
[261] Compare section 321(1) of the NMC.
[262] Gorton, 2007, p.110.
[263] Compare section 253 (1) NMC.
[264] Tiberg, 1995, p.330.

chapters, chapter 13 is applicable to contracts for general cargo[265] and chapter 14 to charterparties.[266]

5.4.4 Due despatch

The essential issue in regards of slow steaming is the possible infringement of "due despatch" in regards of third parties in contracts of carriage. In the Nordic Maritime Codes, the wording is almost[267] exactly identical stating that the carrier has the obligation to "perform the carriage with due care and despatch".[268] Consequently, the carrier is not allowed to deviate from the route, is obliged to operate the ship in accordance with good seamanship and choose the best route possible. However, there are no applicable case law in the Nordic countries which determines how to strict the "due despatch" obligation shall be interpreted in relation to slow steaming.[269]

The previously discussed *Pearl C* case does not deal with situations where the charterer has ordered slow steaming, which the default rules in the standard slow steaming clauses discussed above.[270] Consequently, the situation is unclear. In order to improve the legal certainty for shipowners and charterers the "due despatch" obligation will be more thoroughly analysed.

5.4.4.1 From the shipowner's perspective

It is common that a charterparty will include an express term providing that the shipowner has the obligation to perform the voyage with due despatch.[271] The obligation can be expressed in various ways.[272] Even if the charterparty does not include a specific time frame for the delivery of the cargo, it is assumed that the obligation shall be performed within a

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[265] Chapter 13 (SMC, FMC) corresponds to Section 251-311 in the DMSA, NMC.
[266] Chapter 14 (SMC, FMC) corresponds to Section 321-394 in the DMSA, NMC.
[267] In the DMSA, section 262 (1) states that "the carrier shall perform the carriage with appropriate care and dispatch".
[268] Section 262 of the NMC, which corresponds to the FMC, section 13:12.
[269] Rosholm & Karlsson,2013.
[270] *Ibid*.
[271] Baatz, 2011, p.149.
[272] For example; "with all speed", "with all convenient speed", and "with the utmost despatch".

reasonable time frame.[273] The "due despatch" obligation, in the meaning of clause 8 of NYPE 1993 and 2014, would certainly mean a higher speed than what is considered to be economical speed.[274] Until this point, there is a lack of case law determining if a charterer has the right to order a vessel to slow steam, what is a specific claim by which owners and charterers have so agreed.[275] However, according to the *Hill Harmony*[276] case, the charterer has a general right to give orders regarding the economic aspect of the voyage, leaving the navigational decisions to the master. Consequently, this should mean that the decision to perform the voyage with economical speed shall be up to the charterer, as long as the lower speed is not damaging to the vessel.

Normally, the master, on behalf of the shipowner, issues the bill of lading. The shipowner is then the contractual carrier and the cargo owner can go directly towards the shipowner and claim for damages in case of a delay. Some might argue that the shipowner would not be obliged to follow the charterer's instruction to slow steam, if the reduction in speed would lead to a contractual breach against cargo owners. In practice, the charterer has promised to indemnify the shipowner against claims deriving from slow steaming, and the shipowner can therefore seek recourse from the charterer in such situations. In any event, it is probably safer for the shipowner to follow the charterer's instructions and rely on the indemnity from the charterer.[277] In order to protect himself from liabilities additionally liability, the shipowner is recommended to incorporate a complete slow steaming clause into the bill of lading, even if this burden is usually on the charterer, thereby reduce the risk of receiving claims from cargo owners.[278] Consequently, as long as the shipowner exercises due diligence and complies with the charterer's instructions, the charterer is not able to claim for failure of proceeding with due or utmost dispatch.[279]

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[273] Baatz, 2011, p. 149.
[274] Interview with Philip Woodroffe, Senior Lawyer, Gard AS, 08.10.2014, notes with the author.
[275] *Ibid*.
[276] See footnote 170.
[277] Woodroffe, 2014.
[278] Henderson 2012.
[279] The Charterers P&I Club, 2012, p.3.

5.4.4.2 From the charterers perspective

From the perspective of the charterer, BIMCO's standard clause is giving the shipowner generous rights and protection. The shipowner is given full indemnity for potential claims and cost incurred in connection with slow steaming, which has been ordered by the charterer. However, the charterer has not received any additional protection for future claims.[280] It shall be remembered that the charterer has the decision making power and can therefore evaluate if they would like to take the risk of slow steaming or not.

The Charterers P&I Club have recommended that the charterer shall include a precise provision in all bills of lading, which entails the carrier to slow steam, without it constituting a breach of contract. As a suggestion, the following provision could be added in the bill of lading, on either the front or the reverse side:

> The Carrier may at any time, and without notice to the shipper or receiver, use any route (whether or not the nearest or most direct or customary route) and proceed at any speed, and any delay arising therefrom shall be deemed to be within the contractual carriage and shall not be a deviation.[281]

The Charterers P&I Club is nonetheless rather sceptical if this clause would be successful on the spot market, it is not evident that the shipper or receiver will accept such a clause. Moreover, it is not sure that a court with a cargo friendly jurisdiction would accept such a clause in case of a dispute.[282]

5.4.4.3 From the insurance perspective

The insurance cover is an important aspect of the commercial decision making process. BIMCO and INTERTANKO's standard clauses, generally contradicts with the "utmost despatch" obligation and this could constitute an issue in regards of the insurance cover.

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[280] The Charterers P&I Club, 2012, p.3.
[281] *Ibid*.
[282] *Ibid*.

According to INTERTANKO, the Virtual Arrival agreement would not affect a P&I cover since it is connected to an operational decision.[283] However, they still advice charterers and shipowners to advice their P&I Club in case of doubt. In my opinion, due to the complexity of the effects of these clauses and the various insurance covers, it is highly recommended to seek for advice from a P&I insurer before implementing a Virtual Arrival clause for the first time.

5.4.4.4 The way forward – a sustainable interpretation

Norway has been examining the possibility of implementing a more environmentally friendly approach to slow steaming. The concept of "due despatch" has been evaluated in the proposal of revising the Norwegian Maritime Code.[284] The proposal was written in connection with a potential implementation of the Rotterdam Rules. However, the following suggestion can be made without implementing the Rotterdam Rules.

The drafters of the Rotterdam Rules did not specifically focus on making the shipping industry more environmentally friendly.[285] However, the members of the Norwegian drafting committee were more focused on the matter.[286] Without contradicting with the Rotterdam Rules, the committee proposed two sections with a clear environmental approach, namely, the drafted version of section 261[287] and section 278, with the effect that slow steaming as a general rule would be allowed.

The draft Section 261[288] added that it will be assumed that transportation of goods shall be planned and implemented in due regard with the environment.[289] This addition shall for instance be interpreted in such a way that it does not hinder a carrier to plan a voyage with

[283] Intertanko, Emissions reduction clauses.
[284] NOU 2012:10.
[285] NOU 2012:10, p. 44.
[286] *Ibid*.
[287] Note that section 261 is not the same as the current version of section 261 NMC.
[288] Corresponds with Article 2 of the Rotterdam Rules.
[289] NOU 2012:10, p. 231.

the intention to reduce the CO_2 emissions as much as possible, and at the same time not break the carrier's obligation to carry the goods with due despatch in accordance with Section 262.[290] However, there are no sanctions connected to this rule.[291] This rule is supplemented by the draft version of Section 278 concerning speed reduction due to the consideration of the environment.

The draft version of Section 278, concerning delay, corresponds with Article 21[292] of the Rotterdam Rules. Only the last sentence is different.[293] The addition entails that the focus has shifted and the more environmentally friendly interpretation shall be used, unless nothing else has been expressly agreed between the parties. Nonetheless, the carrier will not be able to eliminate any liability for delays. In case the delay has nothing to do with environmental concerns, the carrier will be liable for not performing the voyage with due despatch.[294] The addition by the committee indicates that the least environmentally friendly option demands a clear and predetermined agreement in order to apply.[295]

The preferred option would be that sustainable speed would be required on an IMO level and implemented nationally, but until then, national legislators could improve the situation by adjusting these rules. Consequently, Finnish legislators have the possibility to actively participate in process of making the shipping industry to be more sustainable by ensuring a more environmentally friendly interpretation in case of a conflict between the cargo owner and the carrier. This could be achieved by implementing a similar wording into the Finnish Maritime Code as has been suggested in the new proposal for a revision of the Norwegian Maritime Code.

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[290] NOU 2012:10, p. 62.
[291] *Ibid*.
[292] Article 21: "Delay in delivery occurs when the goods are not delivered at the place of destination provided for in the contract of carriage within the time agreed."
[293] The addition is the following: «Når ikke annet er avtalt, har transportøren adgang til å legge vekt på miljøhensyn når farten fastsettes.».
[294] NOU 2012:10, p.242.
[295] NOU 2012:10, p. 71.

5.4.5 Deviation

An additional issue to be considered is whether or not slow steaming could be considered as an unjustified deviation under a charterparty. A deviation is normally a geographical deviation where the shipowner decides to take another route than previously agreed.[296] However, it seems to be uncertain if slow steaming could constitute a deviation.[297] There is no authority that specifically states that slow steaming would constitute a deviation.

According to The Hague and Hague-Visby Rules, a deviation is only justified if it has been committed for saving life or property or other reasonable grounds.[298] Most likely, a deliberate deviation to slow steam for a longer period of time would not fall under the interpretation of "reasonable" in case of a dispute. [299] Consequently, if an operator or shipowner has committed an unjustified deviation, they risk losing their right to rely on the defences and limitations[300] stated in the conventions.[301] If this would be the case, the risk for the charterer would increase, both in terms of having to indemnify the shipowner and also in regards of the insurance cover.

5.4.5.1 From the insurance perspective

A deviation could have major impact since the shipowner might lose its P&I cover.[302] The situation could be that deviation is not covered under the general insurance policy and an additional cover would have to be purchased.

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[296] Baatz, 2011, p. 149.
[297] Gard News, *Slow steaming and virtual arrival*, Issue 209, February/April 2013, available at: http://www.gard.no/ikbViewer/page/iknowbook/section?p_document_id=20734072&p_subdoc_id=20734104
[298] The Nordic Maritime Codes are, as previously stated, based on the Hague-Visby Rules and states that" deviation is only permitted for the purpose of rescuing persons or salvaging, ships or cargo or on other reasonable grounds" Section 340 NMC, or Article 14:20 FMC.
[299] Liberty and Deviation Clause for Contracts of Carriage, BIMCO Special Circular, No. 2, March 2010.
[300] Article IV 2 of the Hague-Visby Rules
[301] *Stag Line Ltd v Foscolo Mango & Co Ltd* [1932] AC 328. The case applies to the Hague Rules but it is most likely the same conclusion for the Hague-Visby Rules; Cooke, et. a, p.258.
[302] BIMCO, Liberty and Deviation, 2010.

Shipowners have tried to protect themselves by incorporating a liberty clause into their charterparties. A deviation clause will be interpreted restrictively.[303] Due to the uncertainty if a court would accept such clause, P&I Clubs are usually rather cautious advising if the clause would protect the shipowner against a claim.[304]

In order to improve the situation, BIMCO developed a Liberty and Deviation clause for contract of carriage[305] in cooperation with the P&I Clubs. The clause states that a reasonable deviation is acceptable.[306] Reasonable shall correspond with the interpretation in Article 4 of the Hague and Hague-Visby Rules. Thus, a deviation ordered by the charterer would be acceptable. In case the owner would agree to the request from the charterer to deviate, the charterer is obliged to indemnify the shipowner from potential claims from bill of lading holders. The Liberty and Deviation clause shall also be incorporated into all bills of lading and sub-charterparties. Nonetheless, the BIMCO clause does no guarantee that the shipowner remains insurance cover during the deviation. The shipowner might still need an additional insurance in order to cover the deviation.

5.4.6 Conclusion

The incorporation of the slow steaming clauses into bills of lading is the main issue in this context, due to the mandatory nature of the rules applicable to bills of lading. Consequently, due to the lack of case law on this area, the legal situation is still rather uncertain how far a charterer can protect himself from potential cargo by incorporating a slow steaming clause into a bill of lading. The practical issue is also that it will be quite difficult to incorporate such a clause if the other party is producing the bill of lading standard form.

There are a lot of benefits connected to the implementation of the applicable clause into a bill of lading, however, the parties shall be aware of the potential consequences the imple-

[303] Baatz, 2011, p. 149.
[304] Interview with Inger Eidem, Product Adviser at Gard AS, 10.10.2014. Notes with the author.
[305] See appendix G.
[306] BIMCO, Liberty and Deviation, 2010.

mentation might have. From a commercial point of view, the benefit of slow steaming is probably higher than the risk of facing a claim from cargo owner, but this assessment shall be done on a case-by-case basis.

6 CONCLUSION

This thesis has focused on the possibilities of the efficiency of charterparties from an economical and environmental perspective. Firstly, the well-known concept of notice of readiness in GENCON 94, as in the most common general-purpose voyage charterparty, has been assessed. The negative effect of the current structure of the notice of readiness clause can be that vessels are forced to perform the voyage with full speed to be able to give the notice on time and shift the risk of delay to the charterer. The purpose of a notice of readiness is to alert the ports and enable their operations. Especially before weekends and holidays, this system can lead to a performance of the vessel, which is neither economical nor environmentally friendly. However, with modern technology, it should be possible to alter the system and calculate the estimated time of arrival based on the position and speed of the vessel and consequently avoid a "rush to port". Nonetheless, this will not be achieved unless port operations become more flexible.

The second element that has been assessed in this thesis are various speed reduction clauses. Slow steaming has increased in popularity and NGOs, such as INTERTANKO and BIMCO, have produced standard clauses that the parties can insert in their applicable charterparty. The fact that the slow steaming clause has been incorporated in NYPE 2014 indicates that slow steaming is requested by both charterers and shipowners. A subsequent development has been to draft an agreement on speed reduction in the event that there is a known port congestion. The Virtual Arrival clauses are only focusing on a very limited segment but the system is most likely going to be successful for both parties.

Before implementing slow steaming clauses into a charterparty, the parties have to consider several aspects in order to avoid undesired consequences. The parties shall clearly determine shipowner's obligations in order to avoid uncertainties during the voyage. The master shall be confident and fully aware of the required conditions to be fulfilled before the master's obligation to slow steam has been triggered. One element could be that the master shall receive the instruction to slow steam in writing. Moreover, the clause shall clearly define when the shipowner has the right to refuse such an instruction. The parties could for

instance define more clearly the meaning of the expression "reasonable grounds" in order to ease the decision making process for the master. In the event there are clauses conflicting with the speed reduction clause, such clauses shall be identified and the matter shall be solved before the voyage commences. Performance warranties and due despatch obligations in the charterparty shall be given special attention. The clause shall be incorporated in all applicable bills of ladings. Moreover, the shipowner is recommended to demand an indemnity from the charterer. The purpose of incorporating an indemnity clause is to protect the shipowner from any loss and liabilities the shipowner could suffer as a consequence of reducing the speed on the charterer's request. The economic benefit from reducing the bunker consumption is of essence. However, it is a challenge to divide the economic benefits between the charterer and the shipowner and this element has been missing in the slow steaming clauses discussed in this thesis. Inspiration for such additions can be taken from the Virtual Arrival clauses.

The greatest challenge of slow steaming is the potential conflict in regards of the due despatch obligation, deriving from mandatory legislation. The cargo owners have a strong protection in the Nordic Maritime Codes. Both the contracting and the performing carrier has an obligation to deliver the goods with due despatch. Consequently, both the performing and the contracting carrier risks facing claims from the cargo owners. Moreover, an indemnity clause will most likely not protect the carrier against claims for cargo damage as a result of delay. Consequently, slow steaming is preferred in trades where a delay will not have an effect on the quality of the goods. Environmental issues should become more important in the legislative process of international carriage of goods. However, the mandatory rules still have to enable a sound market for the shipping companies and charterers. International conventions are changed in a slow speed. Consequently, national legislators should focus on improving the legislation in order to enable slow steaming. By ensuring that the more sustainable interpretation of the performance of the voyage by way of the default rule, carriers would probably be more willing to slow steam, also after the end of the recession and when the bunker costs are no longer the main argument for slow steaming.

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SMC Swedish Maritime Code 1994:1009.

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8 APPENDIX

8.1 Appendix A – GENCON 94; clause 6

6. Laytime

* *(a) Separate laytime for loading and discharging*

The cargo shall be loaded within the number of running days/hours as indicated in Box 16, weather permitting, Sundays and holidays excepted, unless used, in which event time used shall count.

The cargo shall be discharged within the number of running days/hours as indicated in Box 16, weather permitting, Sundays and holidays excepted, unless used, in which event time used shall count.

* *(b) Total laytime for loading and discharging*

The cargo shall be loaded and discharged within the number of total running days/hours as indicated in Box 16, weather permitting, Sundays and holidays excepted, unless used, in which event time used shall count.

(c) Commencement of laytime (loading and discharging)

Laytime for loading and discharging shall commence at 13.00 hours, if notice of readiness is given up to and including 12.00 hours, and at 06.00 hours next working day if notice given during office hours after 12.00 hours. Notice of readiness at loading port to be given to the Shippers named in Box 17 or if not named, to the Charterers or their agents named in Box 18. Notice of readiness at the discharging port to be given to the Receivers or, if not known, to the Charterers or their agents named in Box 19.

If the loading/discharging berth is not available on the Vessel's arrival at or off the port of loading/discharging, the Vessel shall be entitled to give notice of readiness within ordinary office hours on arrival there, whether in free pratique or not, whether customs cleared or not. Laytime or time on demurrage shall then count as if she were in berth and in all respects ready for loading/ discharging provided that the Master warrants that she is in fact ready in all respects. Time used in moving from the place of waiting to the loading/ discharging berth shall not count as laytime.

If, after inspection, the Vessel is found not to be ready in all respects to load/ discharge time lost after the discovery thereof until the Vessel is again ready to load/discharge shall not count as laytime.

Time used before commencement of laytime shall count.

* *Indicate alternative (a) or (b) as agreed, in Box 16.*

8.2 Appendix B – Eco speed and consumption clause

SPEED/CONSUMPTION M/E G/E

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ABT 14.0 KNTS ON ABT 30.0 MT + ABT 1.5 MT IFO (380 RMG) BALLAST ABT 14.0 KNTS ON ABT 32.0 MT + ABT 1.5 MT IFO (380 RMG) LADEN

ECO SP/CONS: 12 KNTS ON ABT 23.5 MT IFO M/E + 1.5 MT IFO G/E - BALLAST
" 25.5 " - LADEN

DURING EXCHANGE OF BALLAST AT SEA: ABT 3.0 MT IFO (380 RMG)

CONSUMPTION IN PORT

IDLE : ABT 2.5 MT IFO (380 RMG) + ABT 0.1 MDO PER DAY
GEAR WORKING: ABT 5.5 MT IFO (380 RMG) + ABT 0.1 MDO PER DAY

SPEED/CONSUMPTION IS GIVEN AT DESIGN DRAFT AND BASIS EVEN KEEL, CLEAN HULL, CLEAN FUEL AND GOOD WEATHER/SEA CONDITIONS WITH WINDS NOT EXCEEDING BEAUFORT SCALE 4 AND/OR DOUGLAS SEA STATE 3 AND NOT AGAINST ADVERSE CURRENTS AND NEGATIVE INFLUENCE OF SWELL.

VSL HAS THE OPTION TO USE MDO IN MAIN ENGINE FOR MANOEUVRING, ENTERING OR LEAVING PORTS, SAILING ON CONFINED WATERS, RIVERS, CANALS, ESTUARIES, AS WELL AS DURING ENGINE STAND BY PERIODS.

BUNKERS SUPPLIED MUST MEET ISO 8217:2010 INTERNATIONAL STANDARD AND ANY SUBSEQUENT REVISION THEREOF ASLO MUST COMPLY WITH ANNEX VI OF MARPOL 73/78 AND/OR ANY RELEVANT EUROPEAN UNION DIRECTIVE. BIMCO'S 'BUNKER FUEL SULPHUR CONTENT CLAUSE FOR TIME CHARTERS' TO APPLY.

FOR IFO : RMG380 ALTERNATIVE RMH380 WHEN RMG380 IS NOT AVAILABLE
BUT ALWAYS OBTAINING OWNERS PRIOR APPROVAL.
FOR MDO : DMB

ALL DETAILS AND FIGURES, INCLUDING THE SPEED/CONSUMPTION ONES, ARE GIVEN BASIS 'ABOUT'.

ECO-SETTINGS/GUIDANCE

OWNERS CONFIRM VSL CAN PROCEED AT REDUCED SPEED/RPM AS PER DESCRIPTION. OWNERS HAS PETITIONED HEADOWNERS THAT THE VSL TO STEAM AT THE BELOW FIGURES BASED ON CALCULATIONS FROM OWNERS TECHNICAL DEPT.

ECONOMICAL

SPEED = ABT 12 KTS

CONSUMPTION = ABT 18,5 MT + ABT 1,5 MT IFO - BALLAST

ABT 20,0 MT + ABT 1,5 MT IFO - LADEN RPM =90-92 WOG AND BASIS ON ABOVE CHRTRS WILL NOT MAKE PERFORMANCE CLAIMS, THE VSL'S PERFORMANCE TO BE CHECKED BSS THE VSL DESCRIPTION ONLY.

8.3 Appendix C – NYPE 2014; clause 8, 12 and 38

8. Performance of Voyages

(a) The Master shall perform the voyages with ~~due~~the utmost despatch, unless otherwise ordered by the Charterers in accordance with Clause 38 (Slow Steaming Clause), and shall render all customary assistance with the Vessel's crew. The Master shall be conversant with the English language and (although appointed by the Owners) shall be under the orders and directions of the Charterers as

regards employment and agency; and the Charterers shall perform all cargo handling, including but not limited to loading, stowing, trimming, lashing, securing, dunnaging, unlashing, discharging, and tallying, at their risk and expense, under the supervision of the Master.

(b) If the Charterers shall have reasonable cause to be dissatisfied with the conduct of the Master or officers, the Owners shall, on receiving particulars of the complaint, investigate the same, and, if necessary, make a change in ~~the~~ appointments.

12. Speed and Performance

(a) Upon delivery and throughout the duration of this Charter Party the Vessel shall be capable of maintaining guaranteed speed and daily consumption rates as stated in Appendix "A" in good weather on all sea passages with wind up to and including Force four (4) as per the Beaufort Scale and sea state up to and including Sea State three (3) as per the Douglas Sea Scale (unless otherwise specified in Appendix "A"). Any period during which the Vessel's speed is deliberately reduced to comply with the Charterers' orders/requirements (unless slow steaming warranties have been given in Appendix "A") or for reasons of safety or while navigating within narrow or restricted waters or when assisting a vessel in distress or when saving or attempting to save life or property at sea shall be excluded from performance calculations.

(b) Throughout the duration of this Charter Party, the Charterers shall have the option of using their preferred weather routing monitoring system provided that the use of such system does not compromise the safety of the Vessel. The Master, though not obliged to follow routing information, shall comply with the reporting procedure of the Charterers' weather routing service.

The actual route taken by the Vessel shall be used as the basis of any calculation of the Vessel's performance under this Charter Party.

The Owners and the Charterers agree that evidence of the weather, sea state and other factors affecting the Vessel's performance shall be taken from the Vessel's log book unless such data is substantially contradicted by the 'final report' of an independent weather routing service supported by data obtained from a weather authority that is a member of the World Meteorological Organization.

38. Slow Steaming Clause

(a) The Charterers may at their discretion provide, in writing to the Master, instructions to reduce speed or Revolutions Per Minute (main engine RPM) and/or instructions to adjust the Vessel's speed to meet a specified time of arrival at a particular destination.

(i) *Slow Steaming – Where the Charterers give instructions to the Master to adjust the speed or RPM, the Master shall, subject always to the Master's obligations in respect of the safety of the Vessel, crew and cargo and the protection of the marine environment, comply with such written instructions, provided that the engine(s) continue(s) to operate above the cut-out point of the Vessel's engine(s) auxiliary blower(s) and that such instructions will not result in the Vessel's engine(s) and/or equipment operating outside the manufacturers'/designers' recommendations as published from time to time.

(ii) *Ultra-Slow Steaming – Where the Charterers give instructions to the Master to adjust the speed

or RPM, regardless of whether this results in the engine(s) operating above or below the cut-out point of the Vessel's engine(s) auxiliary blower(s), the Master shall, subject always to the Master's obligations in respect of the safety of the Vessel, crew and cargo and the protection of the marine environment, comply with such written instructions, provided that such instructions will not result in the Vessel's engine(s) and/or equipment operating outside the manufacturers'/designers' recommendations as published from time to time. If the manufacturers'/designers' recommendations issued subsequent to the date of this Charter Party require additional physical modifications to the engine or related equipment or require the purchase of additional spares or equipment, the Master shall not be obliged to comply with these instructions.

** Sub-clauses (a)(i) and (a)(ii) are alternatives; delete whichever is not applicable. In the absence of deletions, alternative (a)(i) shall apply.*

(b) At all speeds the Owners shall exercise due diligence to ensure that the Vessel is operated in a manner which minimises fuel consumption, always taking into account and subject to the following:

(i) The Owners' warranties under this Charter Party relating to the Vessel's speed and consumption;

(ii) The Charterers' instructions as to the Vessel's speed and/or RPM and/or specified time of arrival at a particular destination;

(iii) The safety of the Vessel, crew and cargo and the protection of the marine environment; and

(iv) The Owners' obligations under any bills of lading, waybills or other documents evidencing contracts of carriage issued by them or on their behalf.

(c) For the purposes of Sub-clause (b), the Owners shall exercise due diligence to minimise fuel consumption:

(i) when planning voyages, adjusting the Vessel's trim and operating main engine(s) and auxiliary engine(s);

(ii) by making optimal use of the Vessel's navigation equipment and any additional aids provided by the Charterers, such as weather routing, voyage optimization and performance monitoring systems; and

(iii) by directing the Master to report any data that the Charterers may reasonably request to further improve the energy efficiency of the Vessel.

(d) The Owners and the Charterers shall share any findings and best practices that they may have identified on potential improvements to the Vessel's energy efficiency.

(e) For the avoidance of doubt, where the Vessel proceeds at a reduced speed or with reduced RPM pursuant to Sub-clause (a), then provided that the Master has exercised due diligence to comply with such instructions, this shall constitute compliance with, and there shall be no breach of, any obligation requiring the Vessel to proceed with utmost and/or due despatch (or any other such similar/equivalent expression).

(f) The Charterers shall procure that this Clause be incorporated into all sub-charters and contracts of carriage issued pursuant to this Charter Party. The Charterers shall indemnify the Owners against all consequences and liabilities that may arise from bills of lading, waybills or other documents evidencing contracts of carriage being issued as presented to the extent that the terms of such bills of lading, waybills or other documents evidencing contracts of carriage impose or result in breach of the Owners' obligation to proceed with due despatch or are to be held to be a deviation or the

imposition of more onerous liabilities upon the Owners than those assumed by the Owners pursuant to this Clause.

8.4 Appendix D - Emissions Reduction Clause – pre-voyage agreement

1. Charterers may request Owners to reduce speed during the laden voyage to a specified average speed or to arrive at the discharge port not before a specified date.

2. Owners may:

(i) refuse such requests on reasonable grounds, including but not limited to existing contractual obligations, or for operational or safety reasons, or

(ii) provide Charterers with estimates of additional steaming time, and reduction in bunker consumption, together with the invoice cost of the last bunkers supplied. If Charterers agree Owners' estimates prior to any commencement time provided by Owners, Owners will instruct the vessel to comply with Charterers' request.

3. For the avoidance of doubt, Charterers may make further requests in accordance with sub-clause 1 above at any time before or during the course of the voyage.

4. Charterers shall pay for the additional steaming time at the demurrage rate, less 50% of the bunkers saving both as set out in Owners' estimates under sub clause 2. Payment to be made against Owners' invoice together with freight.

5. Charterers shall incorporate this provision in all Bills of Lading and shall indemnify Owners in respect of all claims against Owners arising from compliance with the Charterers' requests under sub clause 1. above.

8.5 Appendix E - Emissions Reduction Clause – post voyage analysis

1. Charterers may instruct Owners to reduce speed during the laden voyage to a specified average speed or to arrive at the discharge port not before a specified date, subject to Owners' consent, which is not to be unreasonably withheld. It shall be reasonable for Owners to withhold consent due to, inter alia existing contractual obligations, or for operational or safety reasons.

2. Charterers may instruct Owners to further vary the performing speed (subject to the limit of the vessel's service speed) at any stage during the voyage. Any further reduction of the speed shall be subject to Owners' consent in accordance with Sub-clause 1.

3. Charterers shall compensate the Owners for all extra steaming time at the demurrage rate. Any bunker savings shall be shared 50/50 between Owners and Charterers.

4. The bunker invoice price from the last bunkering shall be used to calculate the bunker savings. Any such savings may be deducted from the compensation payable for extra steaming time or shall be reimbursed by Owners if no such deduction has been made.

5. Following completion of the voyage, the Master shall calculate the extra steaming time and any bunker savings arising from Charterers' instructions and present his calculations to Charterers.

6. If Charterers instruct a Weather Analysis Service Provider (WASP) Owners shall provide the WASP with such information as the WASP may reasonably require for its calculations.

7. Charterers shall incorporate this provision in all Bills of Lading and shall indemnify Owners in respect of all claims against Owners arising from compliance with the Charterers' instructions under this clause.

8.6 Appendix F – BIMCO Virtual Arrival Clause for Voyage Charter Parties

BIMCO Virtual Arrival Clause for Voyage Charter Parties

(a) Notwithstanding any other clause in this Charter party entitling the Owners to slow steam, the Charterers shall be entitled to request the Owners in writing to instruct the Master to adjust the Vessel's speed to meet a specified time of arrival at a particular destination, always subject to the Owners' consent which shall not be unreasonably withheld and, in the case of an approach voyage, subject to agreeing an amended cancelling date. The Charterers shall not be entitled to request an adjustment of speed that exceeds the Vessel's warranted speed. Any extra time used on a sea voyage as a direct consequence of the Vessel adjusting speed pursuant to the Charterers' request shall be compensated by the Charterers to the Owners at a rate equal to ___ % of the demurrage rate (if left blank then fifty per cent (50%) shall apply). Such compensation shall be payable by the Charterers to the Owners prior to completion of final discharge. The extra time used shall be agreed by the parties, failing which an independent third party (an "Expert") shall be appointed by mutual agreement. The Expert shall act as an expert and not as an arbitrator and his decision shall be final and binding upon the parties. The costs of such Expert shall be shared equally by the parties. In the absence of mutual agreement as to the identity of the Expert, each party shall appoint an independent Expert at their own expense to calculate the extra time; the average of the results of such calculations shall be binding.

(b) Such extra time shall be calculated on the basis of all relevant information including but not limited to weather data, wave and speed projections and other relevant technical or meteorological data.

(c) Where the Vessel proceeds at a reduced speed pursuant to Sub-clause (a), then provided that the Master has exercised due diligence to comply with such instructions, this shall constitute compliance with, and there shall be no breach of, any obligation requiring the Vessel to proceed with utmost and/or due despatch (or any other such similar/equivalent expression).

(d) The Charterers shall ensure that the terms of the bills of lading, waybills or other documents evidencing contracts of carriage issued by or on behalf of the Owners provide that compliance by Owners with this Clause does not constitute a breach of the contract of carriage. The Charterers shall indemnify the Owners against all consequences and liabilities that may arise from bills of lading, waybills or other documents evidencing contracts of carriage being issued as presented to the extent that the terms of such bills of lading, waybills or other documents evidencing contracts of carriage impose or result in the imposition of more onerous liabilities upon the Owners than those assumed by the Owners pursuant to this Clause.

* * * * *

8.7 Appendix G – Liberty and Deviation Clause for Contracts of Carriage

Liberty and Deviation Clause for Contracts of Carriage

(a) The Vessel shall have liberty to sail with or without pilots, to tow or go to the assistance of vessels in distress, to deviate for the purposes of saving life or property, and for any other reasonable purpose, which term shall include but not be limited to calling at any port or place for bunkers; taking on board spares, stores or supplies; repairs to the vessel necessary for the safe continuation of the voyage; crew changes; landing of stowaways; medical emergencies and ballast water exchange.

(b) If the Charterer requests any deviation for the Charterer's purposes and the Owners consent, such consent to be at the absolute discretion of the Owners, the Charterer shall indemnify the Owners against any and all claims whatsoever brought by the owners of the cargo and/or the holders of Bills of Lading against the Owners by reason of such deviation.

(c) Prior to giving any such consent the Owners may, at their option, require to be satisfied amongst other things that the Charterer has sufficient and appropriate P&I Club cover and/or if necessary, other additional insurance cover, in respect of such a requested deviation,

(d) This Clause shall be incorporated into any sub-charter and any bill of lading issued pursuant hereto.